TOSHIBA

FILE NO. 023-200222

SERVICE MANUAL

COLOR TELEVISION

N2PSP Chassis

50HDX82, 57HDX82

(TAC0273) *(TAC0274)*

– SUMMARY –

50HDX82, 57HDX82 are the same as 65HDX82 except for the parts tabled on back of this sheet.
Use this service manual together with the service manual of 65HDX82 (File No. 020-200218).

PUBLISHED IN JAPAN, Aug., 2002 So

REPLACEMENT PARTS LIST DIFFERENCES

Location No.	Part No.	Description
A001	23411548	Wood Cabinet (50HDX82)
A001	23411713	Wood Cabinet (57HDX82)
A102	23527179	Speaker Grille (50HDX82)
A102	23527193	Speaker Grille (57HDX82)
A175	23929314	Bezel Clip
A201	23540542	Bezel (50HDX82)
A201	23540677	Bezel (57HDX82)
A424	23540544	Back Board (50HDX82)
A424	23540679	Back Board (57HDX82)
A501	23728011	Screw
A701	23064539	Carton (50HDX82)
A701	23064866	Carton (57HDX82)
A703	23946194	Packing, Top (50HDX82)
A703	23946191	Packing, Top (57HDX82)
A708	23946189	Packing, Bottom (50HDX82)
A708	23946190	Packing, Bottom (57HDX82)
H001	23321447	Tuner, EL977LW
K501	23311957	Lenti Sheet, SCREEN50KM-L (50HDX82)
K501	23311955	Lenti Sheet, SCREEN57DM-L (57HDX82)
K502	23311958	Fresnel Sheet, SCREEN50KM-F (50HDX82)

Location No.	Part No.	Description
K502	23311956	Fresnel Sheet, SCREEN57DM-F (57HDX82)
K503	23311858	Screen Protector, SCR-PRO50WAL (50HDX82)
K503	23311857	Screen Protector, SCR-PRO57AL (57HDX82)
K601	23405012	MIRROR50WL (50HDX82)
K601	23405028	Mirror (57HDX82)
✻U901	23787889	SIGNAL/CONV Board, PD0639L (50HDX82)
✻U901	23787890	SIGNAL/CONV Board, PD0639M (57HDX82)
✻UH01	23787644	DIGI-CONV Board, PD0638C (50HDX82)
✻UH01	23787711	DIGI-CONV Board, PD0638E (57HDX82)
⚠V901R	23086799	Protector Coupling R (50HDX82)
⚠V901R	23086411	Protector Coupling R (57HDX82)
⚠V902G	23086800	Protector Coupling G (50HDX82)
⚠V903B	23086801	Protector Coupling B (50HDX82)
⚠V903B	23086412	Protector Coupling B (57HDX82)

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TOSHIBA

FILE NO. 020-200218

SERVICE MANUAL

COLOR TELEVISION

N2PSP Chassis

65HDX82

(TAC0270)

PUBLISHED IN JAPAN, Jul. 2002 (So)

TABLE OF CONTENTS

CHAPTER 1 **GENERAL ADJUSTMENTS**

SAFETY INSTRUCTIONS 3
CRT ASSEMBLY REPLACEMENT AND MOUNTING 4
PICTURE TUBE COMPONENTS ADJUSTMENT 6
REPLACEMENT OF THE CRT 9
SERVICE MODE 10
ELECTRICAL ADJUSTMENT 12
CONVERGENCE ADJUSTMENT 14
SCREEN AND MIRROR ALIGNMENTS 17
CIRCUIT CHECKS 18

CHAPTER 2 **SPECIFIC INFORMATIONS**

SETTING & ADJUSTING DATA 19
LOCATION OF CONTROLS 20
PROGRAMMING CHANNEL MEMORY 22
MECHANICAL DISASSEMBLY 23
CHASSIS REPLACEMENT PARTS LIST 27
PC BOARDS BOTTOM VIEW 51
TERMINAL VIEW OF TRANSISTORS 64
CIRCUIT BLOCK DIAGRAM 67
SPECIFICATIONS ..... END
APPENDIX:
CIRCUIT DIAGRAM

CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.

   Refer to table-1 for high voltage (A), (B).
   (See SETTING & ADJUSTING DATA on page 19)

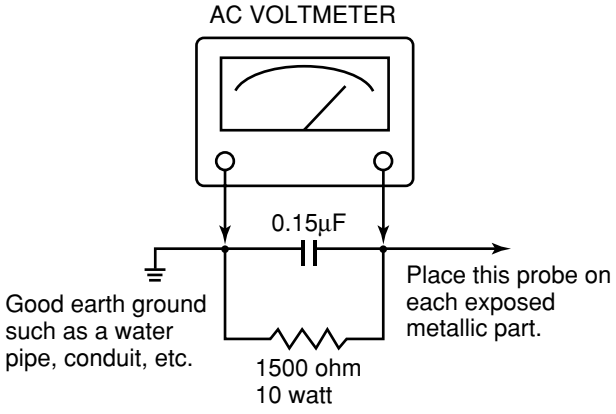
   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This receiver is equipped with a Fail Safe (FS) circuit which prevents the receiver from producing an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure in this manual.
3. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation Transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

   Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 μF, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts rms. This corresponds to 0.2 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

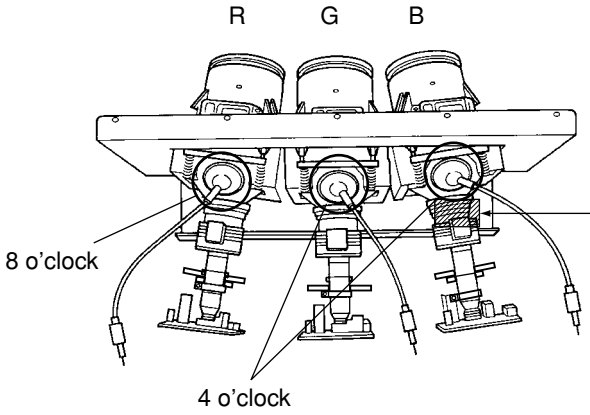

AC VOLTMETER
0.15μF
Good earth ground such as a water pipe, conduit, etc.
Place this probe on each exposed metallic part.
1500 ohm 10 watt

PRODUCT SAFETY NOTICE

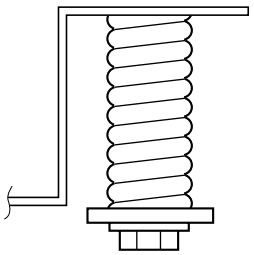
Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

CRT ASSEMBLY REPLACEMENT AND MOUNTING

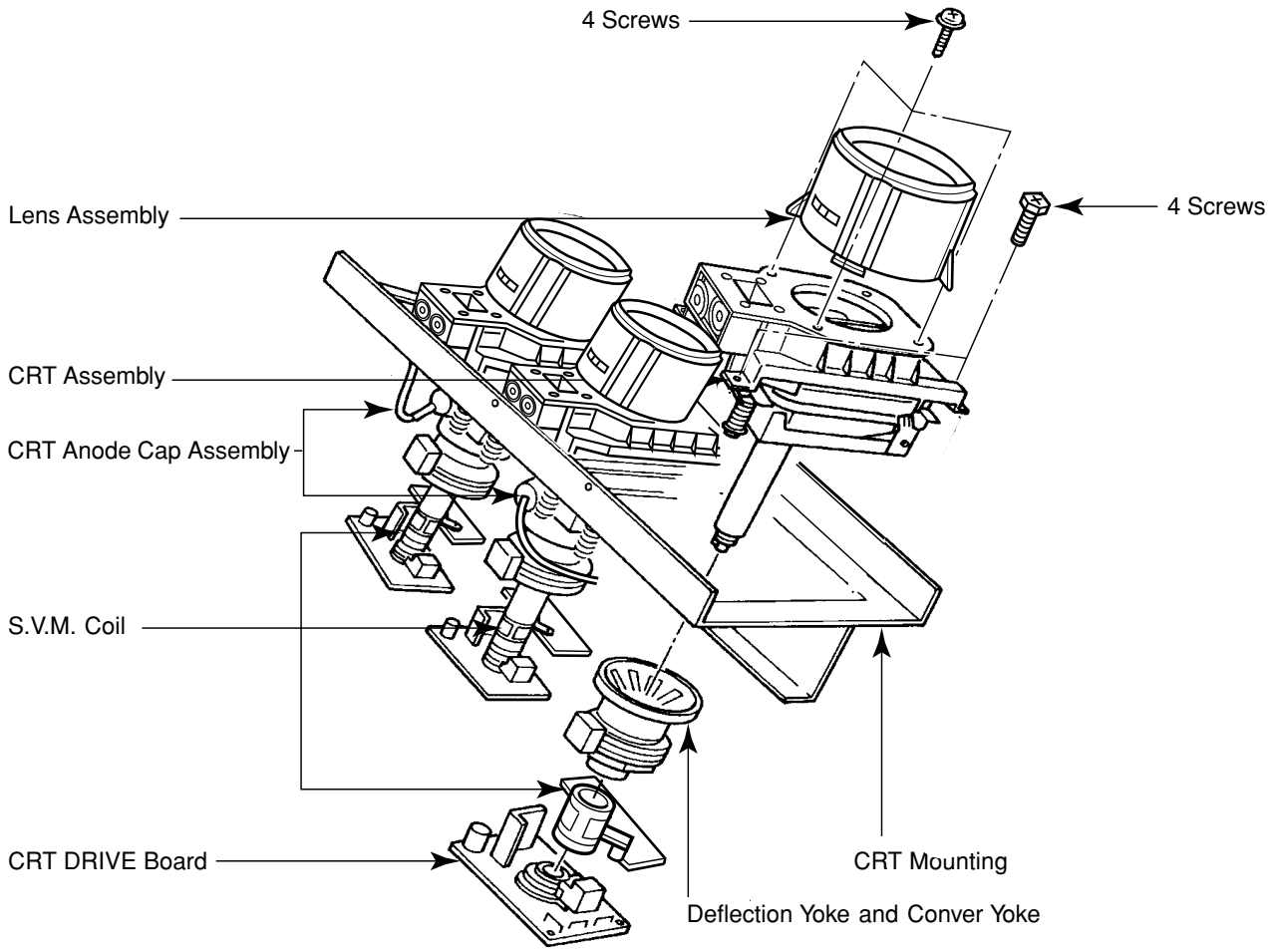
CAUTION : DO NOT LOOSEN THE HEX HEAD BOLTS WITH SPRINGS (12 PCS), BECAUSE THOSE ARE FOR SEALING OF CRT COOLANT.



Attention Serviceman



The Hex Head Bolts with Springs. (see sketch) used on CRT assembly, are "NOT" Adjustment Screws DO NOT LOOSEN-FLUID LEAKAGE WILL OCCUR.



Lens and Neck Components View

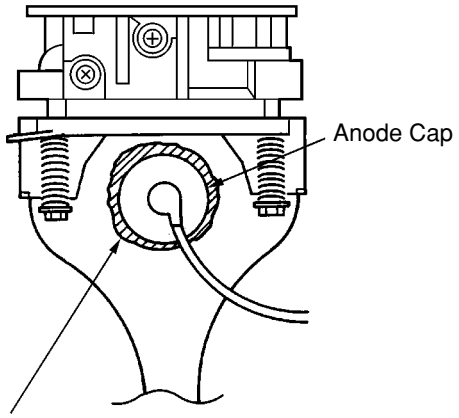
TO REMOVE CRT (Same procedure for R, G, B)

1. Remove CRT DRIVE Board, S. V. M. COIL and DEF. YOKE from CRT.
2. Remove Lens Assembly.
3. Detach CRT Anode Cap from CRT.
4. Remove CRT Assembly from CRT Mounting.

CRT REPLACEMENT (Same procedure for R, G, B)
Reverse the removal procedures except the followings.

1. Anode Cable should be replaced with new one. See “SERVICING PRECAUTIONS” shown below.
2. Install silicon (T461B) to the CRT, replace the Anode cable and put enough silicon again on around the Anode Cap as illustrated.

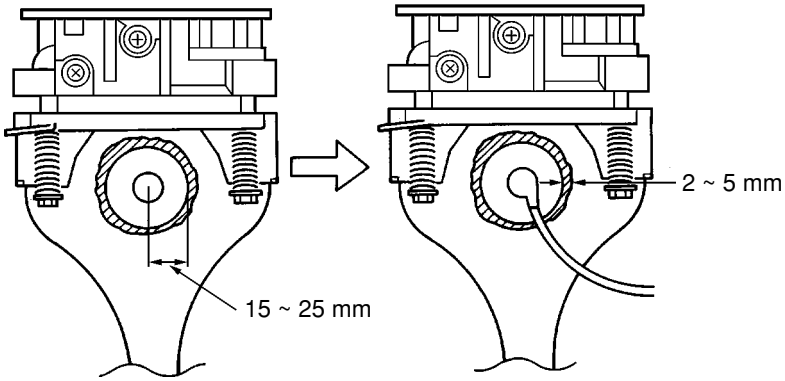
CAUTION: Align the Anode cable as illustrated on page 4.



ADJUSTING PROCEDURE IN REPLACING CRT

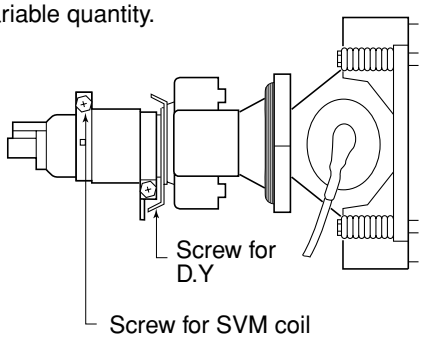
1. R.G.B. FOCUS ADJUSTMENT (page 7.)
2. PICTURE TILT ADJUSTMENT (page 7.)
3. USER CONVERGENCE CENTER CHECK (See owner's manual.)
4. CENTERING ADJUSTMENT (page 7.)
5. CONVERGENCE ADJUSTMENT (page 14.)
6. WHITE BALANCE ADJUSTMENT (page 13.)

Adjustments are complete.



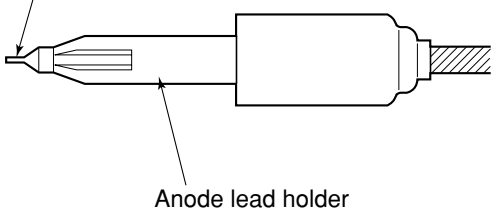
SERVICING PRECAUTIONS

■ Do not use a magnetized screw driver for screws of Deflection Yoke and Velocity Modulation Coil to avoid magnetization of electron gun. Magnetization of electron gun will degrade basic function and result in unbalance of right and left shift of user static convergence, and result in no variable quantity.



■ When replacing the anode cap assembly (CRT) or anode lead assembly (F.B.T.), remove the anode lead holder from old one and attach the holder again to new anode lead.

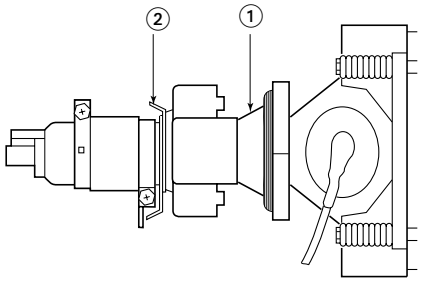
■ Check the point of anode lead in a straight line, if it is winding, please revise it.



WARNING : BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

PICTURE TUBE COMPONENTS ADJUSTMENT

DESCRIPTION OF NECK COMPONENTS



① Deflection yoke and convergence yoke
The position on the neck is required most front (CRT funnel side) and the screw is fastened after rotating yoke adjusting picture tilt.

② Centering magnet
After adjusting picture tilt, picture position is finally fixed by this magnet.
In order to get maximum margin of user convergence control for center of screen, this magnet have to be used for center convergence adjustment.

PREPARATION
Operate the receiver for at least 5 minutes.

R, G, B FOCUS ADJUSTMENT

1. Before adjusting the R, G, B FOCUS, remove the 4 screws of Lens Assembly which is fixed on the CRT Assembly. (See page 4.)
   Then turn around the Lens Assembly by 180˚ to adjust the fastening screw (Fig. a) and fasten the 4 screws to secure Lens Assembly.
2. Select the adjustment mode. (See page 10.)
3. Press “7” button to display the built-in cross-hatch.
4. Press “0” and “RTN” buttons to make the picture a single Red color.
   100 button ..... to erase Red color
   0 button ..... to erase Green color
   RTN button ..... to erase Blue color.
5. Loosen the fasten screw and adjust Red lens focus to best focusing point of picture center. Then fasten the screw. (See Fig. a.)

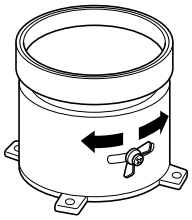


Fig. a

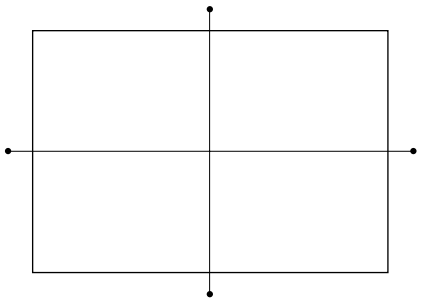
6. Adjust FOCUS VR “R” of FOCUS PACK to find best focusing point of picture center.
7. Repeat steps 3 to 5 for Green and Blue colors.

TILT ADJUSTMENT

Rotate R, G, B deflection yoke so that picture becomes horizon, then fasten screw.

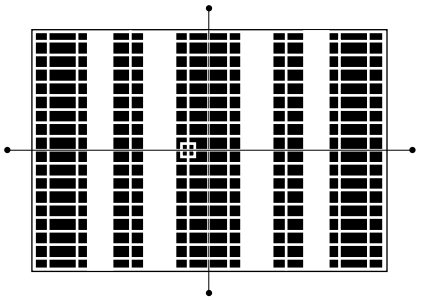
CENTERING ADJUSTMENT

1. Stretch a thread between two center of screen edge (top and bottom, left and right).



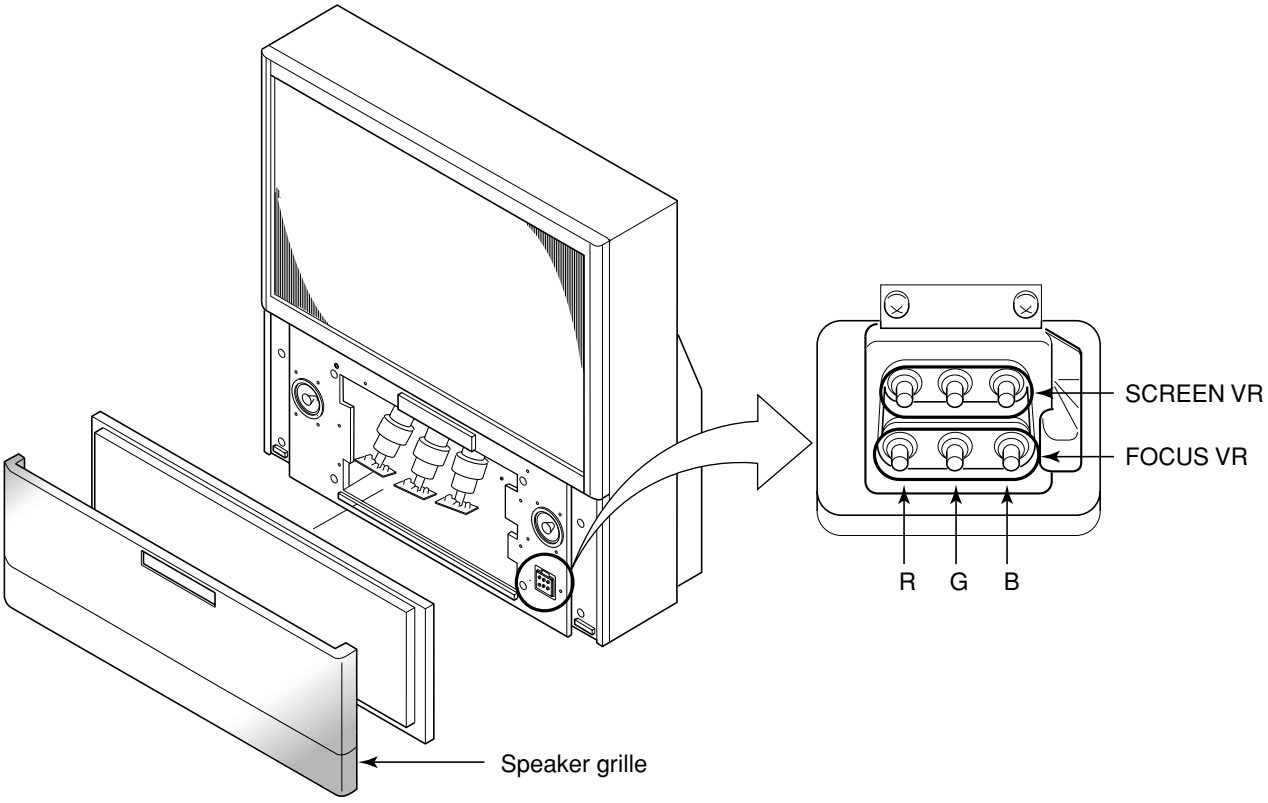
2. Receive NTSC.
   Then select SERVICE MODE. (See Page 10.)

3. Select CONVERGENCE ADJUSTING mode, and press "7" button to display the built-in cross-hatch pattern.
   Move Cursol and recognize horizontal line indicated Y:4. This line is vertical center. Push "9" button to display the vertical stripes, and recognaize horizontal center.



4. Perform VCEN adjustment. (See page 12.)
5. Adjust G centering magnet so that the cross-bar pattern center comes to screen center.
6. Perform HEIGHT adjustment . (See page 13.)
7. Perform VERT. LINEARITY adjustment.
8. Perform WIDTH adjustment. (See page 12.)
9. Check whole quality of green line.
10. Adjust R, B centering magnet so that the cross-bar pattern center comes to screen center.

LOCATION OF SCREEN AND FOCUS VR'S



REPLACEMENT OF THE CRT

Service parts are provided for each R, G and B.
The contents of the parts are as follows.

	R	G	B
HITACHI CRT	23008174	23008175	23008176

REPLACEMENT OF HIGH VOLTAGE CABLE

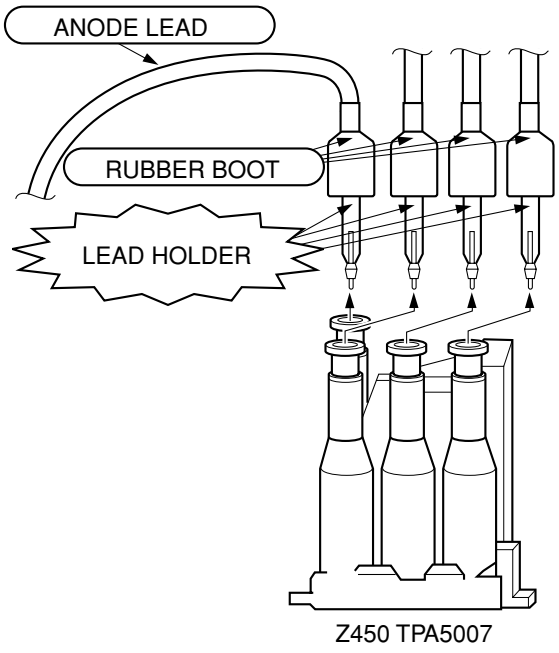


Fig. a

1. When replacing Anode Lead or Anode Cap with new one, remove Lead Holder from old lead as shown in figure below, and put it on new lead. Do not throw away Lead Holder.

NOTE : THE LEAD HOLDER IS ATTACHED TO TPA5007 (Z450), BUT IS NOT ATTACHED TO ANODE LEAD AND ANODE CAP. RUBBER BOOT IS ATTACHED TO ANODE LEAD AND ANODE CAP.

2. Detaching Lead Holder

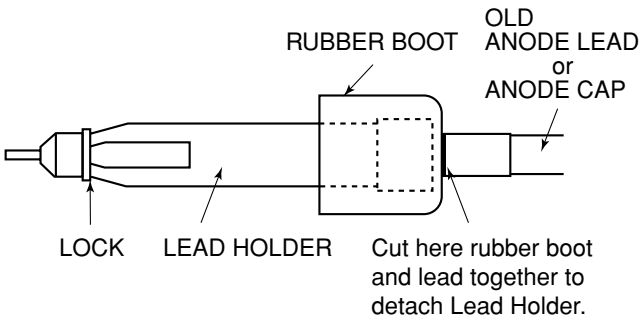


Fig. b

SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press MUTE button twice on Remote Control.

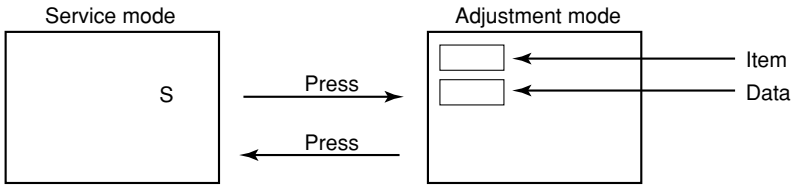
2) Press MUTE button again to keep pressing.

3) While pressing the MUTE button, press MENU button on TV set.

(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

Screen adjustment mode ON/OFF:	TV (ANT)/VIDEO button (on TV)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume ▲/▼ (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	RECALL+Channel button on TV (▲)
Initialization of the self diagnostic data:	RECALL+Channel button on TV (▼)

“RCUT” selection :	1 button
“GCUT” selection :	2 button
“BCUT” selection :	3 button
“SCNT” selection :	4 button
“SCOL” selection :	5 button
“TNTC” selection :	6 button
Convergence adj :	7 button
Self diagnostic display :	9 button

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 19)

5. ADJUSTING THE DATA

1) Pressing of VOLUME ▲ or ▼ button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

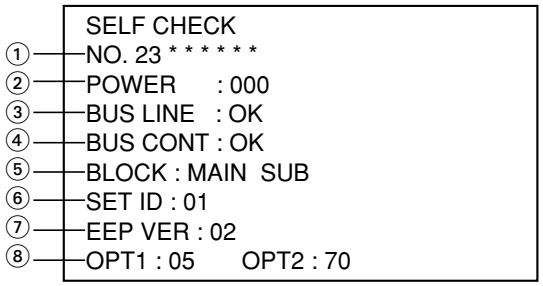
After replacing QA02, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the RECALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform “Programming Channel Memory” on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. SELF DIAGNOSTIC FUNCTION

1) Press “9” button on Remote Control during display of adjustment menu in the service mode. The diagnosis will begin to check if interface among IC’s are executed properly.
2) During diagnosis, the following displays are shown.



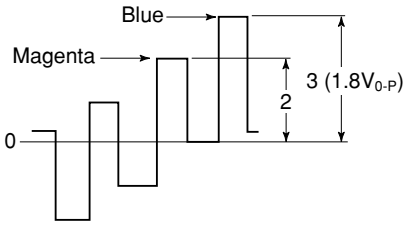
① Part number of microprocessor (QA01)
② Operation number of protection circuit (current limiter) . . . . “000” is normal.
③ BUS line check
- “OK” ..... Normal
- “SCL-GND” or “NG” ..... SCL-GND short circuit
- “SDA-GND” or “NG” ..... SDA-GND short circuit
- “SCL-SDA” or “NG” ..... SCL-SDA short circuit

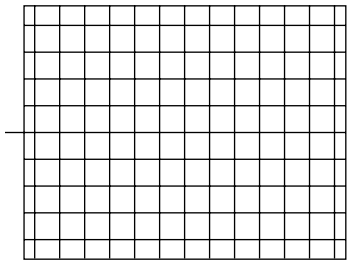
④ BUS line ACK (acknowledge) check
- “OK” ..... Normal
- Display of Location Number . . . . NG
- (Display example)
- “QA02 NG”, “H001 NG”, “Q501 NG” etc.
- Note: The indication of failure place is only one place though failure places are plural. When repair of a failure place finishes, the next failure place is indicated. (The order of priority of indication is left side.)

⑤ Sync. signal check
- Green display ..... Normal
- Red display ..... NG
  - MAIN ..... Main sync
  - SUB ..... Sub sync (when turn on the PIP)

⑥ ID code for TV Set
⑦ Version of "EEP"
⑧ Data for "OPT"

ELECTRICAL ADJUSTMENT

ITEM	ADJUSTMENT PROCEDURE
fH (free-running frequency of Hor. oscillator)	1. Receive NTSC signal. 2. Short the terminal "TP +9V " and the terminal " TP (Free run) " on the signal board with a jumper wire. 3. Connect the probe of frequency counter to the lead of R426 and GND. 4. Adjust the frequency to "33.75±0.2 kHz" by turning R4034 on DPC Board. 5. Disconnect the shorted wire, then confirm that the picture is synchronized.
VERTICAL POSITION (VCEN)	1. Receive NTSC signal. 2. Connect he probe of digital voltmeter to TP-V and TP-G on SIGNAL Board. 3. Call up the adjustment mode display, then select the item VCEN. 4. Press the VOLUME ▲ or ▼ button to get the voltage 0±10 mV.
PICTURE POSITION (HPOS)	1. Receive NTSC signal. 2. Call up the adjustment mode display. 3. Select the item "HPOS", and adjust the data to "80H". 4. Adjust the picture position alternately by turning CENTERING MAGNETS for proper picture position. 5. Check the picture with off-air signal.
WIDTH (WID)	1. Receive NTSC signal. 2. Select the "FULL" mode by PIC SIZE button on Remote Control. 3. Call up the adjustment mode display, then select the item WID. 4. Press the VOLUME ▲ or ▼ button to get the picture so that left and right eddes of video signal begin to lack. 5. Press the VOLUME ▲ button to advance the data by 8 steps. NOTE: Check the horizontal picture position is correct.
SUB-BRIGHTNESS (BRTC)	1. Receive the air signal or aux Video signal. 2. Enter sports mode on user menu. 3. Enter the service mode, then select "**BRTC**" register. 4. Adjust the data to set dark area of picture to proper level.
SUB-COLOR (SCOL)	1. Receive color-bar signal from color-bar generator. 2. Adjust the BRIGHTNESS and CONTRAST to the center (RESET status). 3. Connect oscilloscope to TP501on the MAIN board. 4. Enter the service mode, then select "**SCOL**". 5. Adjust the data value to achieve 1.8$V_{0\text{-}p}$ of blue bar on scope. 6. Check the picture with off-air signal. 

ITEM	ADJUSTMENT PROCEDURE
HEIGHT (HIT)	1. Receive NTSC signal. 2. Select the "FULL" mode by PIC SIZE button on Remote Control. 3. Call up the adjustment mode display and select the item HIT. 4. Press the VOLUME ▲ or ▼ button to get the picture so that top and bottom of video signal begin to lack. 5. Press the VOLUME ▲ button to advance the data by 8 steps. Note: Check the vertical picture position is correct. Adjust the data of height after vertical linearty.
VERTICAL LINEARITY (VLIN) (FULL mode only)	1. Receive cross-hatch pattern. 2. Call up the adjustment mode display, then select the item **VLIN**. 3. Press the VOLUME ▲ or ▼ button to obtain the picture of the best linearity. 4. Then readjust the item HIT. 
WHITE BALANCE (RCUT) (GCUT) (BCUT) (RDRV) (BDRV)	1. Press RESET button on TV or remote hand set. 2. Call up the adjustment mode display, then adjust the data of items **RCUT**, **GCUT** and **BCUT** to “80”. 3. Press TV (ANT)/VIDEO button on TV. 4. Gradually rotate R, G and B SCREEN volume of FOCUS PAC (page 9) clockwise or counterclockwise until the raster appears slightly on the CRT through the each lens, and leave them. (Look into the lens in order to check the raster.) 5. Press TV (ANT)/VIDEO button on TV again. 6. Exit from service mode. 7. Receive white laster pattern signal, and adjust the contrast to the minimum to make white picture to low light. 8. Adjust the data of items **RCUT**, **GCUT** and **BCUT** for low light area. 9. Adjust the contrast to the maximum to make white picture to high light. 10. Adjust the data of items **RDRV** and **BDRV** Controls for proper white-balanced picture in high light area. 11. Check the white balance in both low and high light areas. If necessary, perform again steps from 7 to 9.

CONVERGENCE ADJUSTMENT

Adjust convergence from center to circumference in order.

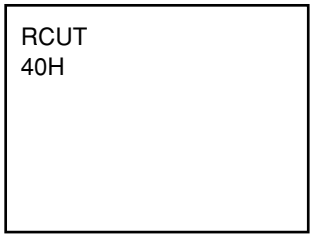
KEY FUNCTION IN THE CONVERGENCE ADJUSTMENT:

Lord BACK UP DATA:	1 button
Up :	2 button
Selet Green color:	3 button
Left :	4 button
Blinking of cursor ON/OFF:	5 button
Right:	6 button
Adjust mode ON/OFF:	7 button
Down:	8 button
Vertical stripe ON/OFF	9 button
Erase Green line:	0 button
Erase Red line:	100 button
Erase Blue line:	ENT button

Note:
Adjusting procedure in replacing convergence board.

1. User convergence center check. Make sure the best convergence setting is about the center of adjustable range.
2. CENTERING ADJUSTMENT
3. PICTURE POSITION ADJUSTMENT
4. HIT, WID ADJUSTMENT
5. CONVERGENCE ADJUSTMENT
6. Execute TOUCH FOCUS following instructions displayed on the screen after finishing CONVERGENCE ADJUSTMENT.
7. If TOUCH FOCUS ERROR is displayed after finishing TOUCH FOCUS, the method of CROSS-HATCH PATTERN after CONVERGENCE adjustment is different from what is exhibited on the right figure, or HARDWARE is out of order.

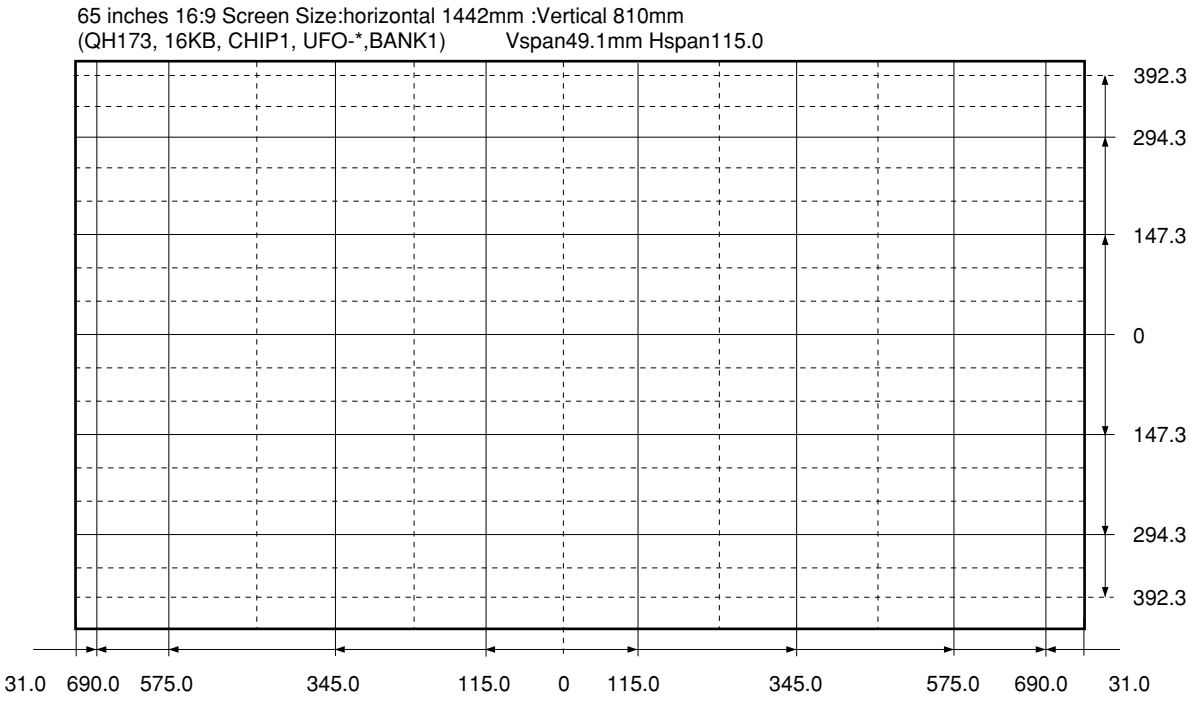
1. Select the adjustment mode following the steps on page 10.



2. Press “7” button to display the built-in cross-hatch pattern and press "9" button to display the vertical stripes.
3. If there is need to load BACKUP DATA, push "1" button, and then push "ENTER" button according to following message. Convergence become adjusted state at factory by this action.
   If there is no need, pass this process.
   Never to use this function to new convergence board, because BACKUP DATA is not exist.
4. Adjustment around cursor can be done.
   The pattern includes three colors (R, G, B).
   The cursor should be blinking in Red.
   This means that the Red color is adjustable.
5. Press “3” button to select Green color to be adjusted.
6. Press “5” button to stop the blinking of cursor.
7. Press “2 (up)”, “8 (down)”, “4 (left)” or “6 (right)” to obtain the correct cross-hatch pattern as above.
   If necessary, the specified color line can be erased from the screen.
   100 button ..... to erase Red line
   0 button ..... to erase Green line
   CH RTN button ..... to erase Blue line
8. Press “5” button to make the cursor blinking.
9. Press “2”, “8”, “4”, “6” buttons to move the cursor to other point to be adjusted.
10. Repeat steps 6 to 9.
11. Repeat steps 5 to 10 to adjust Red and Blue colors.
    Converge the selected color line into the Green line.
12. Press “7” button to memorize the adjusted states.
    At this time, picture changes for about 1 second.
13. Press the TOUCH FOCUS button when "PLEASE PUSH TOUCH FOCUS" is displayed on the screen.
14. TOUCH FOCUS CALIBRATION MODE is executed.
15. It returns to the normal screen after displaying "CALIBRATION FINISHED".

Adjusting Dimension of Each Picture Screen
(16:9 screen size:) 65 inches

(1) HD (1080I/NTSC)



NOTES

In many cases, color misconvergence may be corrected by returning HIT and WID data in main deflection side to initial adjusting values. Following cases will surely require readjustment of convergence.

CRT REPLACEMENT

When CRT is replaced, main deflection readjustment and color matching are required.
Perform following procedures.

1. Replace two CRT's of blue and red.
2. Perform horizontal adjustment for blue and red yokes on base of green CRT data. Mount yoke and velocity mod. coil alignment, pushing towards CRT without gap.
3. Adjust alignment of blue and red. (Refer Alignment adjustment for details.)
4. Rotating centering magnet, adjust CRT centers of red and blue to CRT center of green.
   (Picture position adjustment)
5. Adjust HIT and WID data of main deflection, and decide data at the most precise screen comparing to green data.
6. Adjust convergence of screen picture for color matching. Do not move green one at this time.
7. After convergence adjustment of screen picture finishes, replace green CRT.
   For green CRT as well, repeat steps 2 to 5 above on bases of red and blue color matching to adjust convergence.
8. Execute TOUCH FOCUS following instructions displayed on the screen after finishing convergence adjustments of all the colors.
   Note: Press button "7" again after "PLEASE PUSH TOUCH FOCUS" has been displayed. Then, TOUCH FOCUS will not be executed, and the current state of convergence will be displayed.

REPLACING CONVERGENCE UNIT

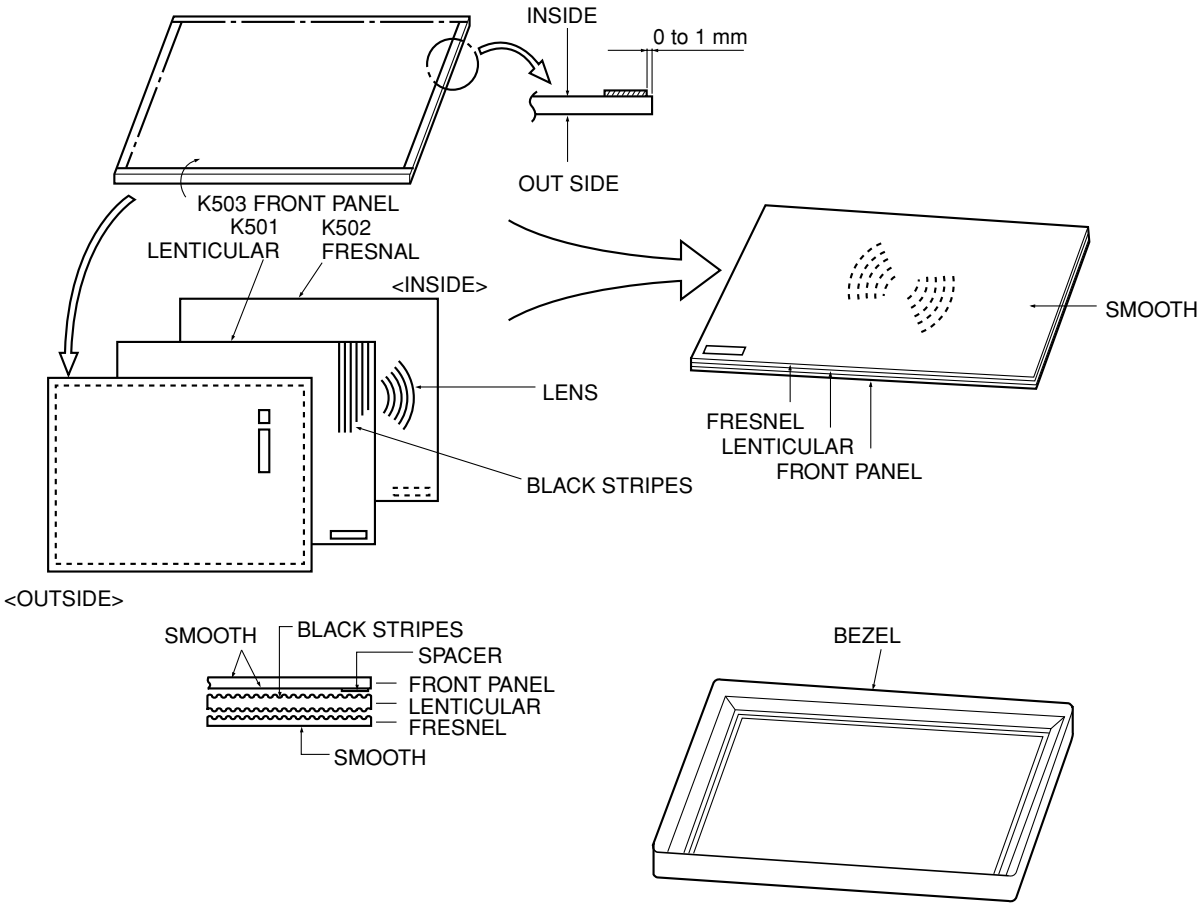
When replacing convergence unit, picture screen require readjustment basically, but the following method allows process be reduced considerably.

1. Replace the memory (Q713) on defective unit with memory on new unit. Mounting the unit on the SET after the above working realizes picture screen before replacement immediately.
2. Mount unit which has old memories, on SET and turn it on. Screen shows whole picture looks like straightly shifted towards vertical or horizontal direction.
3. Adjust again centers of green, red and blue with centering magnets.
4. Check picture screen for slight disparity of color and picture size. If necessary, add some adjustments of main deflection and color matching of convergence.
5. Execute TOUCH FOCUS following instructions displayed on the screen after finishing convergence adjustments of all the colors.
   Note: Press button "7" again after "PLEASE PUSH TOUCH FOCUS" has been displayed. Then, TOUCH FOCUS will not be executed, and the current state of convergence will be displayed.

SCREEN AND MIRROR ALIGNMENTS

ASSEMBLING OF FRONT SCREEN

MOUNTING OF FRONT SCREEN



CAUTION : Do not hold the optical system parts (lens and mirror) with bare hand to avoid finger-prints on the surface of those parts.

HOW TO CLEAN LENS AND MIRROR

1. Be sure to remove sand dust with an air brush, etc.
2. When it is stained slightly, breathe upon it and wipe away with the specified cleaning cloth.
   For other stains than the above, wipe the stains away with the specified cloth into which a cleaning liquid has been soaked.

Cleaning liquid..... **LENS LUSTER** (Manufactured by Edmund Scientific Co.), etc.

HOW TO CLEAN SCREEN

When cleaning the screen, use a soft cloth so as not to damage the screen.

1. Wipe the screen with a dry cloth to remove moisture on the screen.

Note : Absolutely do not use detergent, water, alcohol, benzine, thinner, etc. for cleaning in order not to wipe away the black print on the surface.

CIRCUIT CHECKS

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST to minimum (zero beam current).
3. High voltage must be measured below (B) kV.
   Refer to table-1 for high voltage (B).
   (See SETTING & ADJUSTING DATA on page 19)
4. Vary the BRIGHTNESS to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CAUTION:
When the following parts fail, check the High Voltage after replacing.

Location No.	Name	Descriptions 65"
T461	Flyback	TFB3092AD
C407	Capacitor	4700pF, ±3%
C408	Capacitor	8200pF, ±5%
C441	Capacitor	4700pF, ±3%
C432	Capacitor	8200pF, ±5%
C433	Capacitor	1200pF, ±3%

ANODE VOLTAGE MEASURING METHOD

CAUTION: Take extra precaution when measuring this high voltage. High voltages are also present in surrounding circuit boards (CRT DRIVE assembly, DEFLECTION assembly, and POWER SUPPLY assembly).

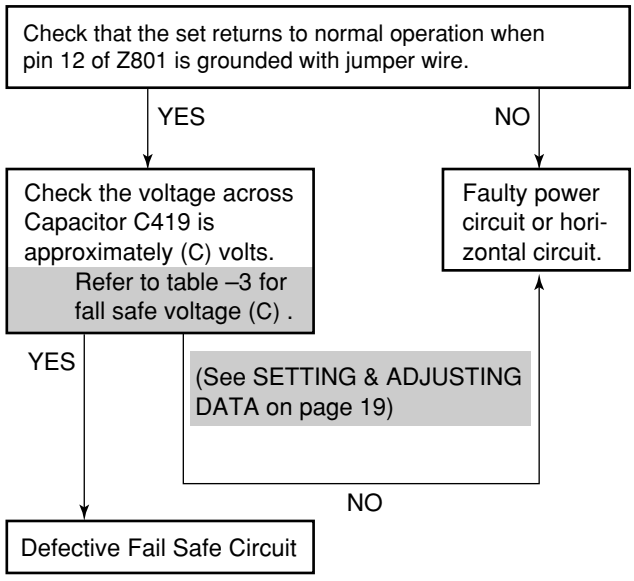
1. Disconnect the FBT anode cable as outlined below. Measure high voltage at the point where the cable enters the FBT.
2. Holding the rubber cover firmly, turn it counterclockwise and check that the lock has been disengaged. (See Fig. b on page 9.)
3. Determine the extent of the rubber cover before disconnecting the cable.
4. Pull straight up the anode cable to disconnect.
5. When reconnecting the cable, proceed in the reverse order. After reconnecting, tug on the cable to check that it is secure.

FS CIRCUIT CHECK

The Fail Safe (FS) circuit check is indispensable for the final check in servicing. Checking should be done following the steps below.

1. Turn the receiver on.
2. Temporarily short TP- (R) and TP- (X) on the DEF/POWER Board with a jumper wire.
   Raster and sound will disappear.
3. The receiver must remain in this state even after removing the jumper wire. This is the evidence that the FS circuit is functioning properly.
4. To obtain a picture again, temporarily turn the receiver off and allow the FS circuit more than 5 seconds to reset. Then turn the receiver on to produce a normal picture.

Troubleshooting Guide for Fail Safe Circuit


Check that the set returns to normal operation when pin 12 of Z801 is grounded with jumper wire.
YES
NO
Check the voltage across Capacitor C419 is approximately (C) volts.
Refer to table –3 for fall safe voltage (C) .
(See SETTING & ADJUSTING DATA on page 19)
Faulty power circuit or horizontal circuit.
YES
NO
Defective Fail Safe Circuit

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【SAFETY INSTRUCTIONS】

		65"
HIGH VOLTAGE AT ZERO BEAM:	(A)	31.0 kV
MAX HIGH VOLTAGE:	(B)	32.5 kV

Table-1

【SERVICE MODE】

ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:

Item	Name of adjustment	Preset	Data
RCUT	R CUTOFF	80H	←
GCUT	G CUTOFF	80H	←
BCUT	B CUTOFF	80H	←
RDRV	R DRIVE	40H	←
BDRV	B DRIVE	40H	←
BRTC	SUB-BRIGHT	80H	←
TNTC	SUB-TINT	48H	←
SCOL	SUB COLOR	0BH	←
SCNT	SUB-CONTRAST	15H	←
HPOS	HORIZ. POSITION	80H	←
VPOS	VERT. POSITION	01H	←
HIT	HEIGHT	31H	55H
LIN	V-LINEARITY	14H	←
VSC	V-S CORRECTION	10H	←
WID	PICTURE WIDTH	1FH	←

Item	Name of adjustment	Preset	Data
VPS	V-SHIFT	0AH	←
COLC	SUB COLOR CEN NTSC	52H	←
VCP	V-COMPENSATE	0AH	←
PARA	E-W PARABOLA (DPC)	17H	←
CNR	E-W CORNER	08H	←
HCP	H-COMPENSATE	00H	←
VFC	V-F CORRECT	00H	←
PHUE	PIP TINT	40H	←
PCNT	PIP CONT	18H	←
PCOL	PIP COLOR	1AH	←
VCEN	V POSITION	76H	←
TVOP	TV OPTION	58H	←
OPT1	TV SET OPTION	50H	←
OPT2	TV SET OPTION	8DH	←

Table-2

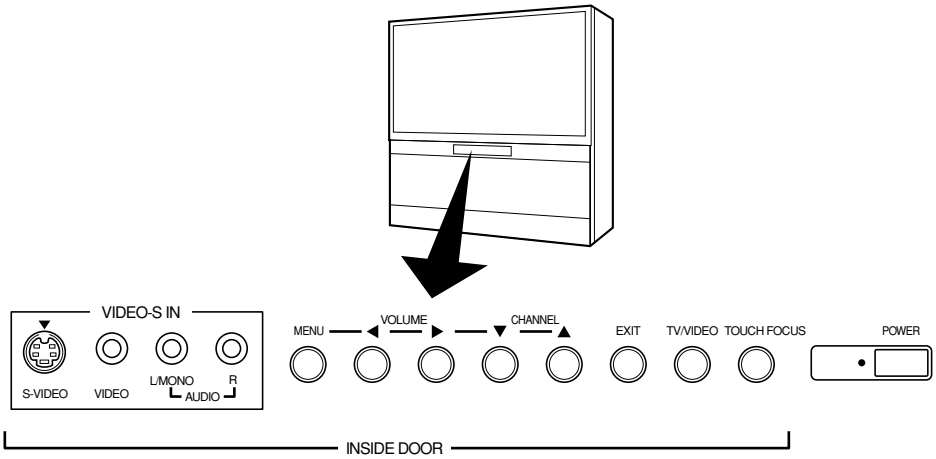
【CIRCUIT CHECKS】

HIGH VOLTAGE DET	(C)	8.7 V

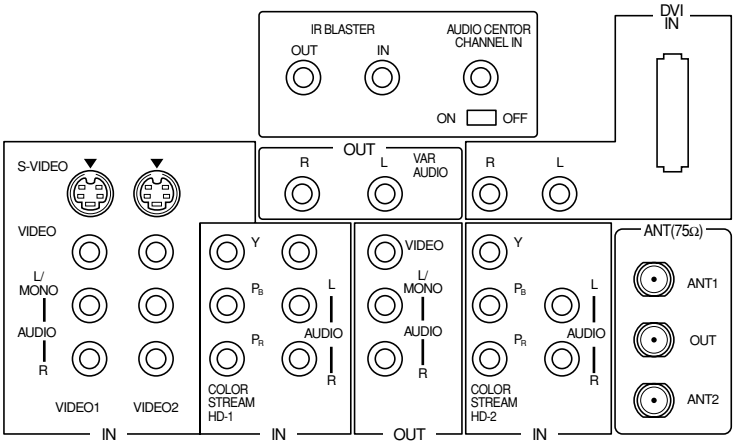
Table-3

LOCATION OF CONTROLS

TV front



TV rear



Remote Control

Power turns the TV on or off

SLEEP sets the TV to turn at a specific time

LIGHT The initial press of the LIGHT button causes two actions:

Channel Numbers (0–9, 100) allow direct access to channels

MODE cycles through the 6 device modes

FAVOURITE allows access to Multi-Window function

PIC SIZE cycles through the three picure formats

MENU allows access to programming

ENTER sets programming menu information

▲▼◄► selects or adjusts programming menus

[FAV] ◄► selects your favourite channels

Volume ▲▼ adjusts the volume level

EXIT exits programming menus

Channel ▲▼ cycles through programmed channels

CH RTN returns to the last viewed channels

RECALL displays on-screen information

MUTE mutes the sound

INPUT selects video input source

PIP allows access to PIP functions

PIP turns the PIP on or off

PIP CH ▲▼ selects the PIP channels

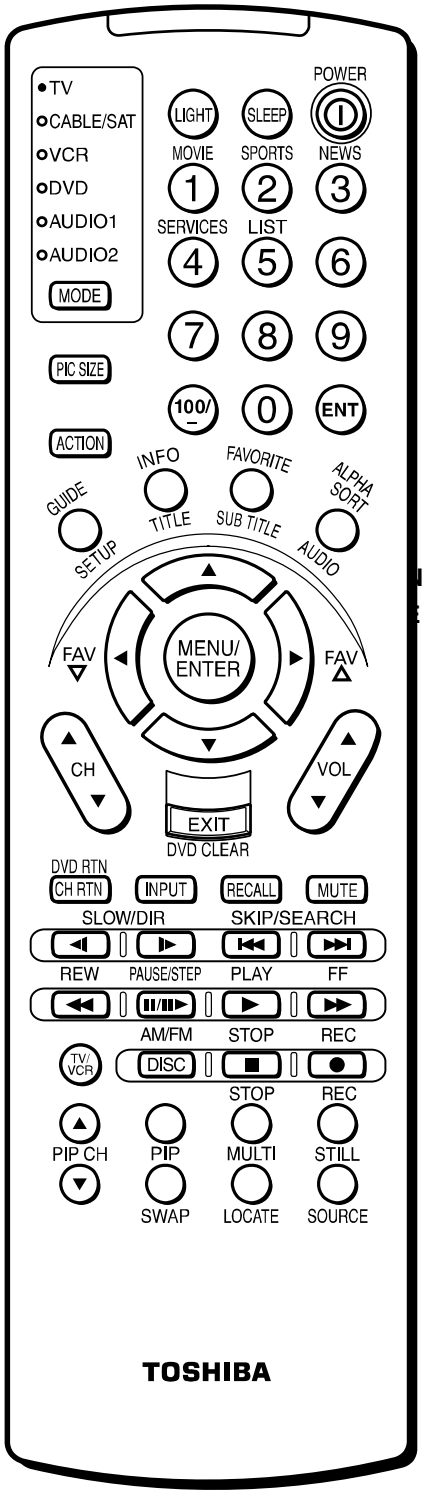
MULTI allows access to Multi-Windows function

STILL freezes the PIP

SOURCE selects the PIP source

LOCATE moves the PIP

SWAP switches the PIP and main pictures



PROGRAMMING CHANNEL MEMORY

The channel memory is the list of TV channel numbers the TV tunes in when you press the CHANNEL ▲ or ▼ button.
First, use the TV/CABLE and CH PROGRAM functions to preset all active channels in your area automatically.
If necessary, arrange the preset channels with the ADD/ERASE functions so that you can tune into only desired channels.
Note: If you utilize both ANT-1 and ANT-2 terminals for some model, perform programming channels for each input source.

TV/CABLE function

1. Press **MENU**, then press ► or ◄ until the SET UP menu appears.
2. Press ▼ (or ▲) until "TV/CABLE" is highlighted.
3. Press ► or ◄ to highlight either "TV" or "CABLE", whichever you use.

CH PROGRAM function

1. Select "CH PROGRAM" following steps 1 and 2 above.
2. Press ► or ◄ to start channel programming.
   The TV will automatically cycle through all the TV or CABLE channels selected by the TV/CABLE function, and store active channels in the channel memory.
3. When channel programming is complete, you will see the message to the right appears.
4. Press **CHANNEL** ▲ or ▼ to make sure the channel programming has been done properly.

ADD/ERASE function

After performing the CH PROGRAM function, you can add or erase specific channels.

1. Select the channel you want to erase using the **CHANNEL** ▲ or ▼ button, or select the channel you want to add using the **Channel Number** buttons.
2. Press **MENU**, then press ► or ◄ until the SET UP menu appears.
3. Press ▼ (or ▲) until "ADD/ERASE" is highlighted.
4. Press ► or ◄ :
   To erase the channel press the button until "ERASE" is highlighted.

   To add the channel press the button until "ADD" is highlighted.
5. Repeat steps 1 to 4 for other channels.

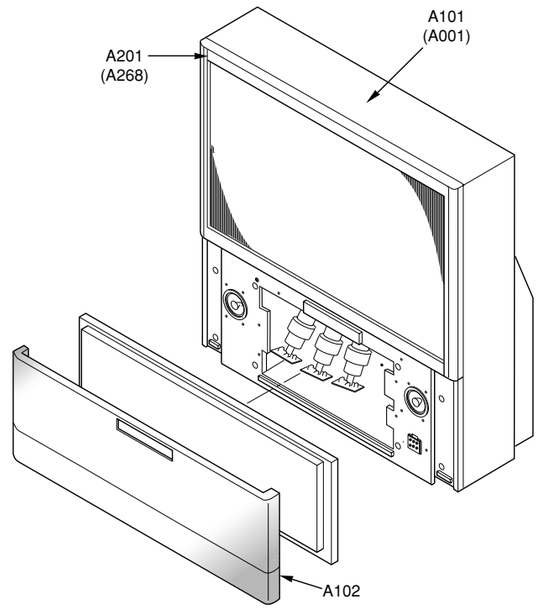
You have now completed the channel programming.

Note: The CHANNEL ▼/▲ buttons on the TV function as the ▼/▲ buttons while a menu is on the screen.

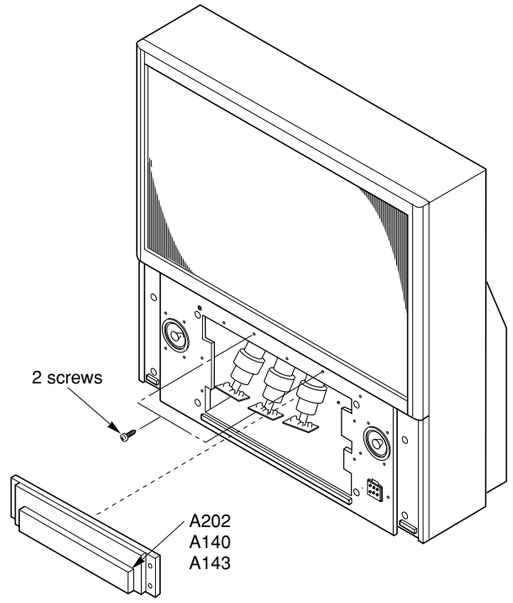
* Please refer to owner's manual in detail.

MECHANICAL DISASSEMBLY

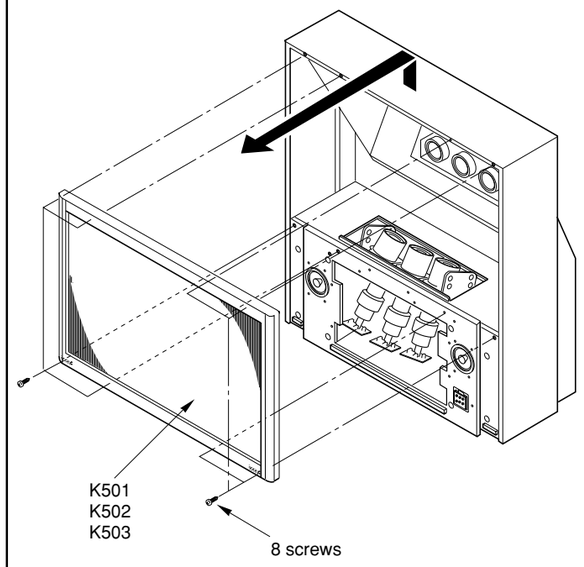
1 Speaker Grille Removal



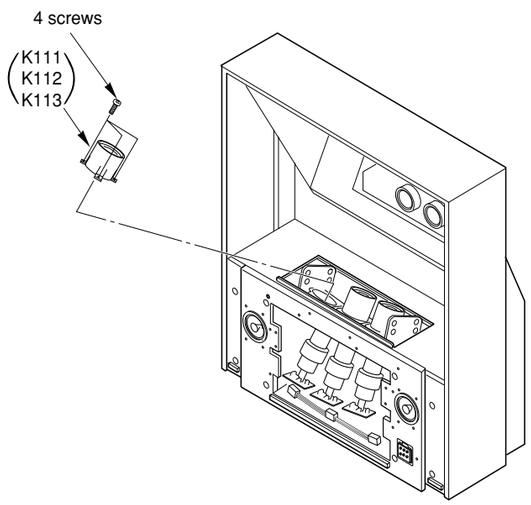
2 Control Panel Removal



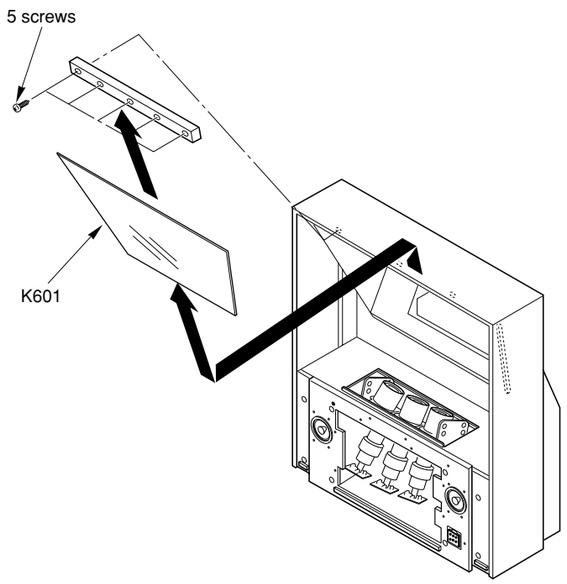
3 Front Mask Removal



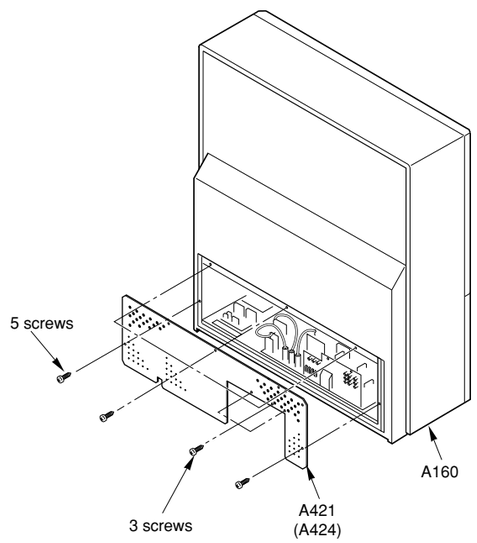
4 Shield Plate, Lens Removal



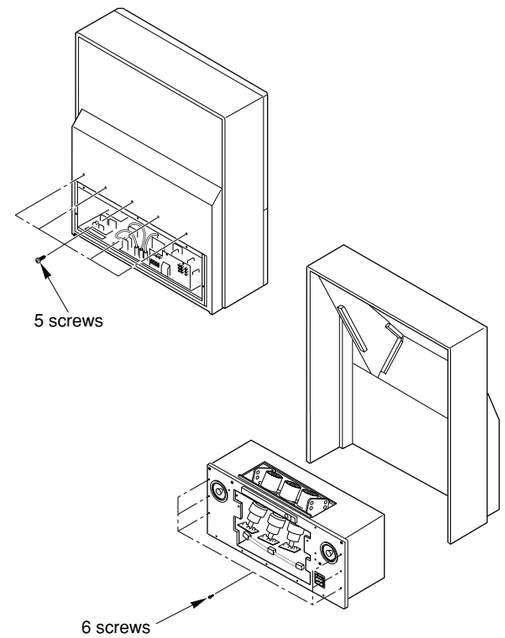
5 Mirror Removal



6 Back Board Removal



7 Light Box Removal



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CHASSIS REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:
- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with ∗ mark is no longer available after the end of the production.*

Models : 65HDX82

Capacitors	CD	:	Ceramic Disk	PF	:	Plastic Film	EL	: Electrolytic
Resistors	CF	:	Carbon Film	CC	:	Carbon Composition	MF	: Metal Film
	OMF	:	Oxide Metal Film	VR	:	Variable Resistor	FR	: Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
CAPACITORS		
C102	24665221	ELECTROLYTIC, 10V 220UF M 3A
C105	24100102	CERAMIC CHIP, 50V F 1000PF Z
C106	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C107	24666221	ELECTROLYTIC, 16V 220UF M 3A
C112	24665221	ELECTROLYTIC, 10V 220UF M 3A
C115	24100102	CERAMIC CHIP, 50V F 1000PF Z
C117	24666221	ELECTROLYTIC, 16V 220UF M 3A
C201	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C202	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C203	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C204	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C205	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C205	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
C206	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C207	24105100	CERAMIC CHIP, 50V CH 10PF D
C207	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C208	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C208	24105100	CERAMIC CHIP, 50V CH 10PF D
C209	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C209	24105100	CERAMIC CHIP, 50V CH 10PF D
C210	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C211	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C212	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C212	24666100	ELECTROLYTIC, 10V 10UF M 3A
C213	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C214	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C215	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C216	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C217	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C218	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C219	24109103	CERAMIC CHIP, 50V B 0.01UF K
C220	24206479	ELECTROLYTIC, 50V 4.7UF M 7L 3A
C220	24503041	PLASTIC FILM , 63V 0.1UF J
C221	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C221	24503041	PLASTIC FILM , 63V 0.1UF J
C222	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C223	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C224	24100104	CERAMIC CHIP, 25V F 0.1UF Z

Location No.	Parts No.	Description
C225	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C226	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C227	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C228	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C229	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C230	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C231	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C232	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C233	24109103	CERAMIC CHIP, 50V B 0.01UF K
C236	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C237	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C238	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C239	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C240	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C241	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C242	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C243	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C244	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C245	24105560	CERAMIC CHIP, 50V CH 56PF J
C246	24105150	CERAMIC CHIP, 50V CH 15PF J
C247	24105270	CERAMIC CHIP, 50V CH 27PF J
C248	24105101	CERAMIC CHIP, 50V CH 100PF J
C249	24105820	CERAMIC CHIP, 50V CH 82PF J
C250	24105560	CERAMIC CHIP, 50V CH 56PF J
C251	24105150	CERAMIC CHIP, 50V CH 15PF J
C252	24105270	CERAMIC CHIP, 50V CH 27PF J
C253	24105101	CERAMIC CHIP, 50V CH 100PF J
C254	24105820	CERAMIC CHIP, 50V CH 82PF J
C255	24105560	CERAMIC CHIP, 50V CH 56PF J
C256	24105150	CERAMIC CHIP, 50V CH 15PF J
C257	24105270	CERAMIC CHIP, 50V CH 27PF J
C258	24105101	CERAMIC CHIP, 50V CH 100PF J
C259	24105820	CERAMIC CHIP, 50V CH 82PF J
C260	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C261	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C262	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C263	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C264	24105100	CERAMIC CHIP, 50V CH 10PF D
C265	24105100	CERAMIC CHIP, 50V CH 10PF D

Location No.	Parts No.	Description
C266	24105100	CERAMIC CHIP, 50V CH 10PF D
C267	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C268	24105101	CERAMIC CHIP, 50V CH 100PF J
C269	24105101	CERAMIC CHIP, 50V CH 100PF J
C272	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C273	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C301	24617820	ELECTROLYTIC, 50V 100UF M 11L 3D
C302	24669101	ELECTROLYTIC, 50V 100UF M 3A
C303	24109473	CERAMIC CHIP, 25V B 0.047UF K
C304	24503053	PLASTIC FILM, 63V 1UF J
C305	24082057	PLASTIC FILM, 100V 220000PF J
C306	24082260	PLASTIC FILM, 100V 4700PF J
C307	24109333	CERAMIC CHIP CK73B 25V 33000PFK
C308	24617820	ELECTROLYTIC, 50V 100UF M 11L 3D
C309	24693473	PLASTIC FILM, 100V 0.047UF J
C311	24109471	CERAMIC CHIP, 50V B 470PF K
C312	24666100	ELECTROLYTIC, 10V 10UF M 3A
C313	24666220	ELECTROLYTIC, 16V 22UF M 3A
C321	24503041	PLASTIC FILM , 63V 0.1UF J
C322	24503045	PLASTIC FILM, 63V 0.22UF J
C323	24503045	PLASTIC FILM, 63V 0.22UF J
C324	24073053	ELECTROLYTIC, 25V 100UF M 3A
C325	24503041	PLASTIC FILM , 63V 0.1UF J
C326	24503041	PLASTIC FILM , 63V 0.1UF J
C327	24567103	PLASTIC FILM, 50V 0.01UF J
C328	24617912	ELECTROLYTIC, 50V 2.2UF K 3A LI
C329	24567183	PLASTIC FILM, 50V 18000PF J
C331	24212102	CERAMIC DISC, 50V B 1000PF K
C332	24073020	ELECTROLYTIC, 10V 1000UF M 3A
C333	24567103	PLASTIC FILM, 50V 0.01UF J
C334	24591102	PLASTIC FILM, 50V 1000PF J
C335	24503049	PLASTIC FILM, 63V 0.47UF J
C336	24503041	PLASTIC FILM , 63V 0.1UF J
C337	24212101	CERAMIC DISC, 50V B 100PF K
C338	24073020	ELECTROLYTIC, 10V 1000UF M 3A
C339	24666101	ELECTROLYTIC, 16V 100UF M 3A
C341	24591222	PLASTIC FILM, 50V 2200PF J
C342	24591222	PLASTIC FILM, 50V 2200PF J
C343	24667101	ELECTROLYTIC, 25V 100UF M 3A
C344	24567393	PLASTIC FILM, 50V 39000PF J
C345	24503041	PLASTIC FILM , 63V 0.1UF J
C346	24669100	ELECTROLYTIC, 50V 10UF M 3A
C347	24085946	ELECTROLYTIC, NONPOLAR, 16V 10UF M 3A
C348	24503045	PLASTIC FILM, 63V 0.22UF J
C349	24503045	PLASTIC FILM, 63V 0.22UF J
C351	24503041	PLASTIC FILM , 63V 0.1UF J
C352	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C353	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C354	24567823	PLASTIC FILM, 50V 82000PF J
C355	24567563	PLASTIC FILM, 50V 56000PF J
C356	24665220	ELECTROLYTIC CE04Q 10V 22UF M 3A
C357	24073037	ELECTROLYTIC, 16V 47UF M 3A
C401	24214332	CERAMIC DISC, 500V B 3300PF K
C402	24214391	CERAMIC DISC, 500V B 390PF K
C403	24676220	ELECTROLYTIC, 100V 22UF M 3A
C405	24567124	PLASTIC FILM, 50V 0.12UF J
⚠ C407	24503099	MT PLA CAP T 1800VH 472H
⚠ C408	24820822	PLASTIC FILM, 630V 8200PF J
C410	24503149	PLASTIC FILM, 250V 3.3UF
C411	24678220	ELECTROLYTIC, 200V 22UF M
C412	24828104	PLASTIC FILM CQ92 T 200V R1UF J
C413	24214221	CERAMIC DISC, 500V B 220PF K
⚠ C414	24503142	MT PLA CAP T 400V 274J
C415	24092484	CERAMIC DISC, 2KV B 1500PF K
C416	24503334	MT PLA CAP T 250V 155J

Location No.	Parts No.	Description
⚠ C417	24503252	MT PLA CAP T 400V 304J
C418	24073120	250V 33UF TOKU
C420	24503041	PLASTIC FILM , 63V 0.1UF J
C421	24073118	ELECTROLYTIC, 160V 33UF M
C422	24591102	PLASTIC FILM, 50V 1000PF J
C423	24211222	CERAMIC DISC, 2KV B 2200PFK
C424	24828473	PLASTIC FILM, 200V 47000PF J
C426	24591153	PLASTIC FILM, 50V 0.015MF J
C427	24567123	PLASTIC FILM, 50V 12000PF J
C428	24591102	PLASTIC FILM, 50V 1000PF J
C429	24567333	PLASTIC FILM, 50V 33000PF J
C431	24591102	PLASTIC FILM, 50V 1000PF J
⚠ C432	24820822	PLASTIC FILM, 630V 8200PF J
⚠ C433	24503061	MT PLA CAP T 1800VH 122H
C434	24073057	ELECTROLYTIC, 25V 1000UF M 3A
C435	24503041	PLASTIC FILM , 63V 0.1UF J
C436	24503041	PLASTIC FILM , 63V 0.1UF J
C437	24666331	ELECTROLYTIC, 16V 330UF M 3A
C438	24666101	ELECTROLYTIC, 16V 100UF M 3A
C439	24591223	PLASTIC FILM, 50V 0.022MF J
⚠ C441	24503099	MT PLA CAP T 1800VH 472H
C451	24567223	PLASTIC FILM, 50V 22000PF J
C452	24073038	ELECTROLYTIC, 16V 100UF M 3A
C453	24109223	CERAMIC CHIP, 25V B 0.022UF K
C454	24797010	ELECTROLYTIC, 50V 1UF M
C455	24109103	CERAMIC CHIP, 50V B 0.01UF K
C456	24085903	ELEC. NONPOLAR, 50V 1.0UF M NP 3A
C457	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C458	24073038	ELECTROLYTIC, 16V 100UF M 3A
C459	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C462	24105101	CERAMIC CHIP, 50V CH 100PF J
C463	24109103	CERAMIC CHIP, 50V B 0.01UF K
C464	24109103	CERAMIC CHIP, 50V B 0.01UF K
C465	24109103	CERAMIC CHIP, 50V B 0.01UF K
C467	24085903	ELEC. NONPOLAR, 50V 1.0UF M NP 3A
C471	24503041	PLASTIC FILM , 63V 0.1UF J
C472	24436100	CERAMIC DISC, 50V SL 10PF C
C473	24503041	PLASTIC FILM , 63V 0.1UF J
C474	24501561	PLASTIC FILM, 50V 560PF J
C475	24501272	PLASTIC FILM, 50V 27OO PF J
C476	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C477	24567103	PLASTIC FILM, 50V 0.01UF J
C478	24591822	PLASTIC FILM, 50V 8200PF J
C479	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C481	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C482	24501272	PLASTIC FILM, 50V 27OO PF J
C483	24501102	PLASTIC FILM, 50V 1000PF J
C484	24503041	PLASTIC FILM , 63V 0.1UF J
C485	24666331	ELECTROLYTIC, 16V 330UF M 3A
C486	24567103	PLASTIC FILM, 50V 0.01UF J
C487	24501151	50V 151J
C488	24503041	PLASTIC FILM , 63V 0.1UF J
C489	24666331	ELECTROLYTIC, 16V 330UF M 3A
C491	24591332	PLASTIC FILM, 50V 3300PF J
C493	24436220	CERAMIC DISC, 50V SL 22PF J
C496	24503049	PLASTIC FILM, 63V 0.47UF J
C497	24073039	ELECTROLYTIC CE04P 16V 220UF M 3A
C498	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C499	24073035	ELECTROLYTIC CE04P 16V 22UF M 3A
C510	24666101	ELECTROLYTIC, 16V 100UF M 3A
C511	24109103	CERAMIC CHIP, 50V B 0.01UF K
C513	24109103	CERAMIC CHIP, 50V B 0.01UF K
C515	24666221	ELECTROLYTIC, 16V 220UF M 3A
C518	24666100	ELECTROLYTIC, 10V 10UF M 3A
C529	24109103	CERAMIC CHIP, 50V B 0.01UF K

Location No.	Parts No.	Description
C530	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C531	24666101	ELECTROLYTIC, 16V 100UF M 3A
C532	24666100	ELECTROLYTIC, 10V 10UF M 3A
C536	24109103	CERAMIC CHIP, 50V B 0.01UF K
C537	24109103	CERAMIC CHIP, 50V B 0.01UF K
C547	24109103	CERAMIC CHIP, 50V B 0.01UF K
C551	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C552	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C553	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C554	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C555	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C556	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C563	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
C564	24666100	ELECTROLYTIC, 10V 10UF M 3A
C565	24206478	ELECTROLYTIC, 50V 0.47UF M 7L 3A
C566	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
C567	24206478	ELECTROLYTIC, 50V 0.47UF M 7L 3A
C568	24109103	CERAMIC CHIP, 50V B 0.01UF K
C570	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C601	24109102	CERAMIC CHIP, 50V B 1000PF K
C602	24109102	CERAMIC CHIP, 50V B 1000PF K
C603	24669100	ELECTROLYTIC, 50V 10UF M 3A
C604	24669100	ELECTROLYTIC, 50V 10UF M 3A
C605	24667470	ELECTROLYTIC, 25V 47UF M 3A
C606	24667470	ELECTROLYTIC, 25V 47UF M 3A
C607	24503041	PLASTIC FILM , 63V 0.1UF J
C608	24503041	PLASTIC FILM , 63V 0.1UF J
C609	24669102	ELECTROLYTIC, 50V 1000UF M 3A
C610	24669102	ELECTROLYTIC, 50V 1000UF M 3A
C611	24667470	ELECTROLYTIC, 25V 47UF M 3A
C612	24794221	ELECTROIYTIC, 16V 220UF M
C661	24797010	ELECTROLYTIC, 50V 1UF M
C662	24797010	ELECTROLYTIC, 50V 1UF M
C663	24797010	ELECTROLYTIC, 50V 1UF M
C664	24797100	ELECTROLYTIC, 50V 10UF M
C665	24109103	CERAMIC CHIP, 50V B 0.01UF K
C666	24797010	ELECTROLYTIC, 50V 1UF M
C667	24794100	ELECTROLYTIC, 16V 10UF M
C680	24669471	ELECTROLYTIC, 50V 470UF M 3A
C681	24666100	ELECTROLYTIC, 10V 10UF M 3A
C682	24092538	CERAMIC CHIP, 10V F 1UF Z
C683	24092538	CERAMIC CHIP, 10V F 1UF Z
C690	24109103	CERAMIC CHIP, 50V B 0.01UF K
C704	24232103	CERAMIC DISC, 50V F 10000PF Z
C705	24206479	ELECTROLYTIC, 50V 4.7UF M 7L 3A
C707	24797470	ELECTROLYTIC, 50V 47UF M
C712	24797470	ELECTROLYTIC, 50V 47UF M
C713	24790470	ELECTROLYTIC, 160V 47UF M
C715	24214472	CERAMIC DISC, 500C B 4700PF K
C717	24214472	CERAMIC DISC, 500C B 4700PF K
C718	24666470	ELECTORLYTIC, 16V 47UF M 3A
C719	24435560	CERAMIC DISC, 500V SL 56PF J
C720	24790220	ELECTROLYTIC, 160V 22UF M
C721	24666470	ELECTORLYTIC, 16V 47UF M 3A
C726	24212102	CERAMIC DISC, 50V B 1000PF K
C760	24797470	ELECTROLYTIC, 50V 47UF M
C761	24212102	CERAMIC DISC, 50V B 1000PF K
C762	24797470	ELECTROLYTIC, 50V 47UF M
C765	24214472	CERAMIC DISC, 500C B 4700PF K
C766	24214472	CERAMIC DISC, 500C B 4700PF K
C767	24790470	ELECTROLYTIC, 160V 47UF M
C768	24666470	ELECTORLYTIC, 16V 47UF M 3A
C769	24666470	ELECTORLYTIC, 16V 47UF M 3A
C770	24435560	CERAMIC DISC, 500V SL 56PF J
C771	24790220	ELECTROLYTIC, 160V 22UF M

Location No.	Parts No.	Description
C780	24797470	ELECTROLYTIC, 50V 47UF M
C781	24212102	CERAMIC DISC, 50V B 1000PF K
C782	24797470	ELECTROLYTIC, 50V 47UF M
C784	24214472	CERAMIC DISC, 500C B 4700PF K
C786	24214472	CERAMIC DISC, 500C B 4700PF K
C787	24790470	ELECTROLYTIC, 160V 47UF M
C788	24666470	ELECTORLYTIC, 16V 47UF M 3A
C789	24666470	ELECTORLYTIC, 16V 47UF M 3A
C790	24435560	CERAMIC DISC, 500V SL 56PF J
C791	24790220	ELECTROLYTIC, 160V 22UF M
C792	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C801	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
C801	24503002	PLASTIC FILM, AC275V 0.22UF M
C802	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C803	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C804	24617033	CHEMICON 04CP 25V 4R7M
C805	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C806	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C810	24073119	200V1000U105C
C811	24092597	CERAMIC DISC CK45E AC250V 4700PF M
C812	24092597	CERAMIC DISC CK45E AC250V 4700PF M
C813	24092597	CERAMIC DISC CK45E AC250V 4700PF M
C814	24092593	CERAMIC DISC, AC250V E 1000PF M
C815	24092593	CERAMIC DISC, AC250V E 1000PF M
C820	24763101	ELECTROLYTIC, 16V 100UF M
C821	24092730	CERAMIC CHIP, 16V B 0.1UF K
C822	24763101	ELECTROLYTIC, 16V 100UF M
C823	24109103	CERAMIC CHIP, 50V B 0.01UF K
C824	24092730	CERAMIC CHIP, 16V B 0.1UF K
C825	24109103	CERAMIC CHIP, 50V B 0.01UF K
C826	24763101	ELECTROLYTIC, 16V 100UF M
C827	24092730	CERAMIC CHIP, 16V B 0.1UF K
C830	24073037	ELECTROLYTIC, 16V 47UF M 3A
C831	24503047	PLASTIC FILM, 63V 0.33UF J
C832	24073038	ELECTROLYTIC, 16V 100UF M 3A
C833	24073037	ELECTROLYTIC, 16V 47UF M 3A
C834	24503047	PLASTIC FILM, 63V 0.33UF J
C835	24073016	ELECTROLYTIC CE04P 10V 100UF M 3A
C836	24073037	ELECTROLYTIC, 16V 47UF M 3A
C837	24503047	PLASTIC FILM, 63V 0.33UF J
C838	24073016	ELECTROLYTIC CE04P 10V 100UF M 3A
C840	24679220	ELECTROLYTIC, 250V 22UF M 3A
C841	24073043	ELECTROLYTIC, 16V 2200UF M 3A
C842	24503041	PLASTIC FILM , 63V 0.1UF J
C843	24092469	CERAMIC DISC, 2KV B 100PF K
C845	24073082	CHEMICON 04P 50V 2R2M
C851	24073073	ELECTROLYTIC, 35V 2200UF M 3A
C852	24073094	ELECTROLYTIC, 50V 1000UF M 3A
C853	24073057	ELECTROLYTIC, 25V 1000UF M 3A
C854	24073092	ELECTROLYTIC, 50V 330UF M 3A
C857	24073060	ELECTROLYTIC, 25V 4700UF M 3A
C858	24073060	ELECTROLYTIC, 25V 4700UF M 3A
C860	24214103	CERAMIC DISC, 500V B 10000PF K
C862	24092474	CERAMIC DISC, 2KV B 220PF K
C863	24503041	PLASTIC FILM , 63V 0.1UF J
C864	24092347	CERAMIC DISC, 2KV R 1500PF K
C865	24092347	CERAMIC DISC, 2KV R 1500PF K
C866	24503053	PLASTIC FILM, 63V 1UF J
C867	24591682	PLASTIC FILM, 50V 6800PF J
C868	24073067	ELECTROLYTIC CE04P 35V 47UF M 3A
C869	24678229	ELECTROLYTIC, 200V 2.2UF M 3A
C870	24503171	PLASTIC CAP T 630V 124J
C871	24092347	CERAMIC DISC, 2KV R 1500PF K
C873	24503045	PLASTIC FILM, 63V 0.22UF J
C874	24092474	CERAMIC DISC, 2KV B 220PF K

Location No.	Parts No.	Description
C876	24503041	PLASTIC FILM , 63V 0.1UF J
C877	24092347	CERAMIC DISC, 2KV R 1500PF K
C878	24503171	PLASTIC CAP T 630V 124J
C879	24212101	CERAMIC DISC, 50V B 100PF K
C882	24678478	ELECTROLYTIC, 200V 0.47UF M 3A
C884	24086916	ELECTROLYTIC CE692R 160V 330UF M 3D
C890	24073095	ELECTROLYTIC, 50V 2200UF M 3A
C891	24828333	PLASTIC FILM, 200V 33000PF J
C894	24073059	ELECTROLYTIC, 25V 3300UF M 3A
C895	24073044	ELECTROLYTIC, 16V 3300UF M 3A
C898	24092398	CERAMIC DISC, 25V 0.1UF Z, 24092398A NI TOOITSU
C901	24211102	CERAMIC DISC, 2KV B 1000PF K
C902	24794101	ELECTROLYTIC, 16V 100UF M
C903	24232103	CERAMIC DISC, 50V F 10000PF Z
C904	24436221	CERAMIC DISC, 50V SL 220PF J
C906	24679220	ELECTROLYTIC, 250V 22UF M 3A
C907	24214101	CERAMIC DISC, 500V B 100PF K
C911	24211102	CERAMIC DISC, 2KV B 1000PF K
C912	24794101	ELECTROLYTIC, 16V 100UF M
C913	24232103	CERAMIC DISC, 50V F 10000PF Z
C914	24436221	CERAMIC DISC, 50V SL 220PF J
C915	24679220	ELECTROLYTIC, 250V 22UF M 3A
C917	24214101	CERAMIC DISC, 500V B 100PF K
C921	24211102	CERAMIC DISC, 2KV B 1000PF K
C922	24794101	ELECTROLYTIC, 16V 100UF M
C923	24436221	CERAMIC DISC, 50V SL 220PF J
C924	24232103	CERAMIC DISC, 50V F 10000PF Z
C925	24679220	ELECTROLYTIC, 250V 22UF M 3A
C926	24214101	CERAMIC DISC, 500V B 100PF K
C930	24214103	CERAMIC DISC, 500V B 10000PF K
C935	24214103	CERAMIC DISC, 500V B 10000PF K
C936	24214103	CERAMIC DISC, 500V B 10000PF K
C961	24763102	ELECTROLYTIC, 16V 1000UF M
C962	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C967	24436471	CERAMIC DISC, 50V SL 470PF J
C7703	24503037	MT PLA CAP 63V 0.047UF J
C7704	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7706	24503047	PLASTIC FILM, 63V 0.33UF J
C7708	24105150	CERAMIC CHIP, 50V CH 15PF J
C7709	24105150	CERAMIC CHIP, 50V CH 15PF J
C7710	24105150	CERAMIC CHIP, 50V CH 15PF J
C7711	24105150	CERAMIC CHIP, 50V CH 15PF J
C7712	24105150	CERAMIC CHIP, 50V CH 15PF J
C7713	24105150	CERAMIC CHIP, 50V CH 15PF J
C7714	24105150	CERAMIC CHIP, 50V CH 15PF J
C7715	24105150	CERAMIC CHIP, 50V CH 15PF J
C7716	24105150	CERAMIC CHIP, 50V CH 15PF J
C7717	24105150	CERAMIC CHIP, 50V CH 15PF J
C7718	24105150	CERAMIC CHIP, 50V CH 15PF J
C7719	24105150	CERAMIC CHIP, 50V CH 15PF J
C7721	24105102	CERAMIC CHIP, 25V CH 1000PF J
C7722	24105331	CERAMIC CHIP, 50V CH 330PF J
C7724	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7725	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7726	24105101	CERAMIC CHIP, 50V CH 100PF J
C7727	24105331	CERAMIC CHIP, 50V CH 330PF J
C7729	24105102	CERAMIC CHIP, 25V CH 1000PF J
C7730	24105331	CERAMIC CHIP, 50V CH 330PF J
C7732	24105331	CERAMIC CHIP, 50V CH 330PF J
C7733	24105331	CERAMIC CHIP, 50V CH 330PF J
C7735	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7736	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7737	24105102	CERAMIC CHIP, 25V CH 1000PF J
C7738	24105331	CERAMIC CHIP, 50V CH 330PF J

Location No.	Parts No.	Description
C7740	24105331	CERAMIC CHIP, 50V CH 330PF J
C7741	24105331	CERAMIC CHIP, 50V CH 330PF J
C7751	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7753	24567334	PLASTIC FILM, 50V 0.33UF J
C7766	24667221	ELECTROLYTIC, 25V 220UF M 3A
C7767	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7768	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7769	24109103	CERAMIC CHIP, 50V B 0.01UF K
C7770	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7772	24567334	PLASTIC FILM, 50V 0.33UF J
C7774	24105331	CERAMIC CHIP, 50V CH 330PF J
C7779	24105331	CERAMIC CHIP, 50V CH 330PF J
C7780	24105471	CERAMIC CHIP, 50V CH 470PF J
C7783	24105471	CERAMIC CHIP, 50V CH 470PF J
C7791	24667471	ELECTROLYTIC, 25V 470UF M 3A
C7792	24109472	CERAMIC CHIP, 50V B 4700PF K
C7793	24503041	PLASTIC FILM , 63V 0.1UF J
C7794	24503041	PLASTIC FILM , 63V 0.1UF J
C7795	24109223	CERAMIC CHIP, 25V B 0.022UF K
C7796	24669221	ELECTROLYTIC, 50V 220UF M 3A
C7797	24667471	ELECTROLYTIC, 25V 470UF M 3A
C7798	24669221	ELECTROLYTIC, 50V 220UF M 3A
C7810	24092511	CHIP CERA CAP 50V CH 471B
C7811	24105471	CERAMIC CHIP, 50V CH 470PF J
C7812	24109103	CERAMIC CHIP, 50V B 0.01UF K
C7813	24666220	ELECTROLYTIC, 16V 22UF M 3A
C7814	24666220	ELECTROLYTIC, 16V 22UF M 3A
C7815	24591223	PLASTIC FILM, 50V 0.022MF J
C7817	24109332	CERAMIC CHIP, 50V B 3300PF K
C7818	24109102	CERAMIC CHIP, 50V B 1000PF K
C7819	24109102	CERAMIC CHIP, 50V B 1000PF K
C7820	24109332	CERAMIC CHIP, 50V B 3300PF K
C7822	24503053	PLASTIC FILM, 63V 1UF J
C9100	24436471	CERAMIC DISC, 50V SL 470PF J
C9200	24436471	CERAMIC DISC, 50V SL 470PF J
CA04	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA05	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA06	24109392	CERAMIC CHIP, 50V B 3900PF K
CA07	24109392	CERAMIC CHIP, 50V B 3900PF K
CA08	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA09	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
CA14	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA18	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA23	24105101	CERAMIC CHIP, 50V CH 100PF J
CA25	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA27	24092538	CERAMIC CHIP, 10V F 1UF Z
CA28	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA30	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA31	24092538	CERAMIC CHIP, 10V F 1UF Z
CA33	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA34	24092538	CERAMIC CHIP, 10V F 1UF Z
CA37	24105101	CERAMIC CHIP, 50V CH 100PF J
CA38	24105101	CERAMIC CHIP, 50V CH 100PF J
CA39	24105101	CERAMIC CHIP, 50V CH 100PF J
CA42	24109392	CERAMIC CHIP, 50V B 3900PF K
CA45	24105471	CERAMIC CHIP, 50V CH 470PF J
CA46	24105101	CERAMIC CHIP, 50V CH 100PF J
CA49	24105101	CERAMIC CHIP, 50V CH 100PF J
CA54	24092730	CERAMIC CHIP, 16V B 0.1UF K
CA59	24105101	CERAMIC CHIP, 50V CH 100PF J
CA60	24105101	CERAMIC CHIP, 50V CH 100PF J
CA61	24666220	ELECTROLYTIC, 16V 22UF M 3A
CA68	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA69	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA71	24105331	CERAMIC CHIP, 50V CH 330PF J

Location No.	Parts No.	Description
CA72	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA73	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA80	24503041	PLASTIC FILM , 63V 0.1UF J
CA81	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA82	24503049	PLASTIC FILM, 63V 0.47UF J
CA251	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA331	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA611	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA701	24092538	CERAMIC CHIP, 10V F 1UF Z
CA705	24666100	ELECTROLYTIC, 10V 10UF M 3A
CB01	24794470	ELECTORLYTIC, 16V 47UF M
CB05	24666100	ELECTROLYTIC, 10V 10UF M 3A
CB13	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CB14	24105331	CERAMIC CHIP, 50V CH 330PF J
CB15	24794100	ELECTROLYTIC, 16V 10UF M
CB51	24590103	PLASTIC FILM, 50V 0.01MF J
CB52	24794470	ELECTORLYTIC, 16V 47UF M
CB53	24503041	PLASTIC FILM , 63V 0.1UF J
CB54	24436221	CERAMIC DISC, 50V SL 220PF J
CB55	24797010	ELECTROLYTIC, 50V 1UF M
CB56	24794470	ELECTORLYTIC, 16V 47UF M
CB57	24503041	PLASTIC FILM , 63V 0.1UF J
CB58	24794470	ELECTORLYTIC, 16V 47UF M
CB59	24590103	PLASTIC FILM, 50V 0.01MF J
CB60	24794100	ELECTROLYTIC, 16V 10UF M
CB61	24503041	PLASTIC FILM , 63V 0.1UF J
CB62	24105331	CERAMIC CHIP, 50V CH 330PF J
CB90	24109103	CERAMIC CHIP, 50V B 0.01UF K
CB91	24666100	ELECTROLYTIC, 10V 10UF M 3A
CC01	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CC02	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC03	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CC04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CD01	24797479	ELECTROLYTIC, 50V 4.7UF M
CD02	24797479	ELECTROLYTIC, 50V 4.7UF M
CD03	24503041	PLASTIC FILM , 63V 0.1UF J
CD04	24503041	PLASTIC FILM , 63V 0.1UF J
CD05	24590102	PLASTIC FILM, 50V 1000PF J
CD06	24503045	PLASTIC FILM, 63V 0.22UF J
CD07	24797229	ELECTROLYTIC, 50V 2.2UF M
CD08	24794221	ELECTROIYTIC, 16V 220UF M
CD09	24232103	CERAMIC DISC, 50V F 10000PF Z
CD10	24797479	ELECTROLYTIC, 50V 4.7UF M
CD11	24797479	ELECTROLYTIC, 50V 4.7UF M
CD12	24797479	ELECTROLYTIC, 50V 4.7UF M
CD13	24797479	ELECTROLYTIC, 50V 4.7UF M
CD14	24797479	ELECTROLYTIC, 50V 4.7UF M
CD15	24797479	ELECTROLYTIC, 50V 4.7UF M
CD16	24797479	ELECTROLYTIC, 50V 4.7UF M
CD17	24503045	PLASTIC FILM, 63V 0.22UF J
CD18	24590102	PLASTIC FILM, 50V 1000PF J
CD19	24567333	PLASTIC FILM, 50V 33000PF J
CD20	24503039	PLASTIC FILM, 63V 0.068UF J
CD21	24539104	PLASTIC FILM, 50V 0.1UF J
CD22	24797479	ELECTROLYTIC, 50V 4.7UF M
CD23	24797479	ELECTROLYTIC, 50V 4.7UF M
CD24	24590103	PLASTIC FILM, 50V 0.01MF J
CD25	24590103	PLASTIC FILM, 50V 0.01MF J
CD26	24590103	PLASTIC FILM, 50V 0.01MF J
CD41	24503041	PLASTIC FILM , 63V 0.1UF J
CD42	24590103	PLASTIC FILM, 50V 0.01MF J
CD43	24503041	PLASTIC FILM , 63V 0.1UF J
CD44	24503041	PLASTIC FILM , 63V 0.1UF J
CD45	24503049	PLASTIC FILM, 63V 0.47UF J
CD46	24503049	PLASTIC FILM, 63V 0.47UF J

Location No.	Parts No.	Description
CD47	24503047	PLASTIC FILM, 63V 0.33UF J
CD48	24503047	PLASTIC FILM, 63V 0.33UF J
CD49	24797010	ELECTROLYTIC, 50V 1UF M
CD60	24797100	ELECTROLYTIC, 50V 10UF M
CD61	24590333	PLASTIC FILM, 50V 0.033UF J
CD62	24590103	PLASTIC FILM, 50V 0.01MF J
CD63	24503049	PLASTIC FILM, 63V 0.47UF J
CD64	24539334	PLASTIC FILM, 50V 0.33UF J
CD65	24436221	CERAMIC DISC, 50V SL 220PF J
CD70	24794221	ELECTROIYTIC, 16V 220UF M
CD71	24232103	CERAMIC DISC, 50V F 10000PF Z
CD73	24797100	ELECTROLYTIC, 50V 10UF M
CD74	24794221	ELECTROIYTIC, 16V 220UF M
CD75	24797100	ELECTROLYTIC, 50V 10UF M
CD76	24797100	ELECTROLYTIC, 50V 10UF M
CD77	24797100	ELECTROLYTIC, 50V 10UF M
CD81	24503041	PLASTIC FILM , 63V 0.1UF J
CD82	24503041	PLASTIC FILM , 63V 0.1UF J
CD83	24503041	PLASTIC FILM , 63V 0.1UF J
CD84	24503041	PLASTIC FILM , 63V 0.1UF J
CD89	24797479	ELECTROLYTIC, 50V 4.7UF M
CH001	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH004	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH005	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH006	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH007	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH008	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH009	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH010	24092743	CERAMIC CHIP, 10V F 470NF Z
CH011	24762221	ELECTROLYTIC, 10V 220UF M
CH012	24763101	ELECTROLYTIC, 16V 100UF M
CH013	24763101	ELECTROLYTIC, 16V 100UF M
CH014	24108101	CERAMIC CHIP, 50V SL 100PF J
CH015	24108330	CERAMIC CHIP, 50V SL 33PF J
CH016	24108330	CERAMIC CHIP, 50V SL 33PF J
CH017	24108330	CERAMIC CHIP, 50V SL 33PF J
CH018	24108330	CERAMIC CHIP, 50V SL 33PF J
CH019	24108330	CERAMIC CHIP, 50V SL 33PF J
CH020	24108330	CERAMIC CHIP, 50V SL 33PF J
CH040	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH041	24108101	CERAMIC CHIP, 50V SL 100PF J
CH042	24108101	CERAMIC CHIP, 50V SL 100PF J
CH043	24108101	CERAMIC CHIP, 50V SL 100PF J
CH044	24108101	CERAMIC CHIP, 50V SL 100PF J
CH051	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH052	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH053	24105070	CERAMIC CHIP CC73CH 50V 7PF D
CH061	24109103	CERAMIC CHIP, 50V B 0.01UF K
CH062	24092730	CERAMIC CHIP, 16V B 0.1UF K
CH063	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH101	24105070	CERAMIC CHIP CC73CH 50V 7PF D
CH102	24105070	CERAMIC CHIP CC73CH 50V 7PF D
CH241	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH244	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH247	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH249	24092730	CERAMIC CHIP, 16V B 0.1UF K
CH250	24092730	CERAMIC CHIP, 16V B 0.1UF K
CH301	24109472	CERAMIC CHIP, 50V B 4700PF K
CH302	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH303	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH304	24109472	CERAMIC CHIP, 50V B 4700PF K
CH305	24567104	PLASTIC FILM, 50V 0.1UF J
CH306	24567104	PLASTIC FILM, 50V 0.1UF J
CH307	24109472	CERAMIC CHIP, 50V B 4700PF K
CH308	24100104	CERAMIC CHIP, 25V F 0.1UF Z

Location No.	Parts No.	Description
CH309	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH310	24109472	CERAMIC CHIP, 50V B 4700PF K
CH311	24567104	PLASTIC FILM, 50V 0.1UF J
CH312	24567104	PLASTIC FILM, 50V 0.1UF J
CH313	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH314	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH315	24567104	PLASTIC FILM, 50V 0.1UF J
CH316	24567104	PLASTIC FILM, 50V 0.1UF J
CH317	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH318	24567104	PLASTIC FILM, 50V 0.1UF J
CH319	24567104	PLASTIC FILM, 50V 0.1UF J
CH320	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH321	24763101	ELECTROLYTIC, 16V 100UF M
CH322	24763101	ELECTROLYTIC, 16V 100UF M
CH401	24105220	CERAMIC CHIP, 50V CH 22PF J
CH402	24105220	CERAMIC CHIP, 50V CH 22PF J
CH403	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH404	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH407	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH408	24794100	ELECTROLYTIC, 16V 10UF M
CH409	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH413	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH414	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH501	24794470	ELECTORLYTIC, 16V 47UF M
CH502	24794470	ELECTORLYTIC, 16V 47UF M
CH503	24794470	ELECTORLYTIC, 16V 47UF M
CH504	24794470	ELECTORLYTIC, 16V 47UF M
CH505	24794470	ELECTORLYTIC, 16V 47UF M
CH506	24794470	ELECTORLYTIC, 16V 47UF M
CH511	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH512	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH513	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH514	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH515	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH516	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH517	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH518	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH521	24105100	CERAMIC CHIP, 50V CH 10PF D
CH522	24590222	PLASTIC FILM, 50V 2200PF J
CH523	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH524	24105821	CERAMIC CHIP, 25V CH 820PF J
CH526	24105050	CERAMIC CHIP, 50V CH 5PF C
CH527	24105181	CERAMIC CHIP, 50V CH 180PF J
CH541	24105100	CERAMIC CHIP, 50V CH 10PF D
CH542	24590222	PLASTIC FILM, 50V 2200PF J
CH543	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH544	24105821	CERAMIC CHIP, 25V CH 820PF J
CH546	24105050	CERAMIC CHIP, 50V CH 5PF C
CH547	24105181	CERAMIC CHIP, 50V CH 180PF J
CH561	24105100	CERAMIC CHIP, 50V CH 10PF D
CH562	24590222	PLASTIC FILM, 50V 2200PF J
CH563	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH564	24105821	CERAMIC CHIP, 25V CH 820PF J
CH566	24105050	CERAMIC CHIP, 50V CH 5PF C
CH567	24105181	CERAMIC CHIP, 50V CH 180PF J
CH621	24105100	CERAMIC CHIP, 50V CH 10PF D
CH622	24590222	PLASTIC FILM, 50V 2200PF J
CH623	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH624	24105821	CERAMIC CHIP, 25V CH 820PF J
CH626	24105050	CERAMIC CHIP, 50V CH 5PF C
CH627	24105181	CERAMIC CHIP, 50V CH 180PF J
CH641	24105100	CERAMIC CHIP, 50V CH 10PF D
CH642	24590222	PLASTIC FILM, 50V 2200PF J
CH643	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH644	24105821	CERAMIC CHIP, 25V CH 820PF J

Location No.	Parts No.	Description
CH646	24105050	CERAMIC CHIP, 50V CH 5PF C
CH647	24105181	CERAMIC CHIP, 50V CH 180PF J
CH661	24105100	CERAMIC CHIP, 50V CH 10PF D
CH662	24590222	PLASTIC FILM, 50V 2200PF J
CH663	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH664	24105821	CERAMIC CHIP, 25V CH 820PF J
CH666	24105050	CERAMIC CHIP, 50V CH 5PF C
CH667	24105181	CERAMIC CHIP, 50V CH 180PF J
CH707	24794470	ELECTORLYTIC, 16V 47UF M
CR12	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR13	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR14	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR15	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR16	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR17	24092730	CERAMIC CHIP, 16V B 0.1UF K
CS03	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS04	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS07	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS08	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS09	24105331	CERAMIC CHIP, 50V CH 330PF J
CS10	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS11	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS12	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS13	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS14	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS15	24105331	CERAMIC CHIP, 50V CH 330PF J
CS16	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS21	24105101	CERAMIC CHIP, 50V CH 100PF J
CS22	24105101	CERAMIC CHIP, 50V CH 100PF J
CS24	24105331	CERAMIC CHIP, 50V CH 330PF J
CS25	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS28	24105331	CERAMIC CHIP, 50V CH 330PF J
CS29	24105331	CERAMIC CHIP, 50V CH 330PF J
CS32	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS33	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS34	24105331	CERAMIC CHIP, 50V CH 330PF J
CS35	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS36	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS38	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS43	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS45	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS51	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS52	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS53	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS54	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS55	24105331	CERAMIC CHIP, 50V CH 330PF J
CS56	24105331	CERAMIC CHIP, 50V CH 330PF J
CS57	24105331	CERAMIC CHIP, 50V CH 330PF J
CS58	24105331	CERAMIC CHIP, 50V CH 330PF J
CS60	24503041	PLASTIC FILM , 63V 0.1UF J
CS91	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS92	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS93	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS94	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS95	24763101	ELECTROLYTIC, 16V 100UF M
CS96	24109103	CERAMIC CHIP, 50V B 0.01UF K
CS122	24797101	ELECTROLYTIC, 50V 100UF M
CS123	24797470	ELECTROLYTIC, 50V 47UF M
CS124	24797229	ELECTROLYTIC, 50V 2.2UF M
CS125	24590103	PLASTIC FILM, 50V 0.01MF J
CS652	24794220	ELECTROLYTIC, 16V 22UF M
CS676	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV01	24085981	ELEC. NONPOLAR CE04J 16V 10UF M 11L NP
CV02	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV03	24085981	ELEC. NONPOLAR CE04J 16V 10UF M 11L NP

Location No.	Parts No.	Description
CV04	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV05	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV08	24666471	ELECTROLYTIC, 16V 470UF M 3A
CV09	24666471	ELECTROLYTIC, 16V 470UF M 3A
CV10	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV13	24794100	ELECTROLYTIC, 16V 10UF M
CV14	24232103	CERAMIC DISC, 50V F 10000PF Z
CV15	24232103	CERAMIC DISC, 50V F 10000PF Z
CV17	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV21	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV22	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV23	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV24	24109102	CERAMIC CHIP, 50V B 1000PF K
CV27	24762471	ELECTROLYTIC, 10V 470UF M
CV29	24763101	ELECTROLYTIC, 16V 100UF M
CV30	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV37	24797339	ELECTROLYTIO, 50V 3.3UF M
CV38	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CV39	24109102	CERAMIC CHIP, 50V B 1000PF K
CV46	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV60	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV61	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV62	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV63	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV64	24206100	ELECTROLYTIC, 50V 10UF M 7L 3A
CV65	24591122	PLASTIC FILM, 50V 1200PF J
CV66	24105561	CERAMIC CHIP, 50V CH 560PF J
CV67	24591102	PLASTIC FILM, 50V 1000PF J
CV68	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CV77	24763222	ELECTROLYTIC CE04G 16V 2200UF M
CV78	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV82	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV83	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV84	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV85	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV86	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV87	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV90	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV91	24763101	ELECTROLYTIC, 16V 100UF M
CV100	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CV135	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV136	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV137	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV138	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CW09	24109103	CERAMIC CHIP, 50V B 0.01UF K
CX91	24092538	CERAMIC CHIP, 10V F 1UF Z
CY40	24206100	ELECTROLYTIC, 50V 10UF M 7L 3A
RESISTORS		
R101	24383183	OXIDE METAL FILM, 2W 18K OHM J
R119	24000445	CHIP JUMPER, 1608TYPE
R150	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R151	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R152	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R171	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R172	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R173	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R174	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R201	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R202	24872102	CHIP, METAL FILM, 1/16W 1K OHM J
R203	24872102	CHIP, METAL FILM, 1/16W 1K OHM J
R204	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R205	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R205	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R206	24011102	CHIP, METAL FILM, 1/20W 1K OHM J

Location No.	Parts No.	Description
R207	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R208	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R209	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R210	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R211	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R212	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R213	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R214	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R215	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R216	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R217	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R218	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R219	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R220	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R221	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R222	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R223	24011302	CHIP, METAL FILM, 1/20W 3K OHM J
R224	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R225	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R226	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R227	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R228	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R229	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R230	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R231	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R233	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R234	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R235	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R236	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R237	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R238	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R239	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R240	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R241	24367153	CARBON FILM, 1/6W 15K OHM G
R241	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R242	24367333	CARBON FILM, 1/6W 33K OHM G
R242	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R243	24367223	CARBON FILM, 1/6W 22K OHM G
R243	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R244	24367223	CARBON FILM, 1/6W 22K OHM G
R244	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R245	24366124	CARBON FILM, 1/6W 120K OHM J
R245	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R246	24366102	CARBON FILM, 1/6W 1K OHM J
R246	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R247	24366474	CARBON FILM, 1/6W 470K OHM J
R247	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R248	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R249	24366472	CARBON FILM, 1/6W 4.7K OHM J
R249	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R250	24366472	CARBON FILM, 1/6W 4.7K OHM J
R250	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R251	24366101	CARBON FILM, 1/6W 100 OHM J
R251	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R252	24366103	CARBON FILM, 1/6W 10K OHM J
R252	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R253	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R254	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R255	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R256	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R257	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R258	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R259	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R301	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R302	24011102	CHIP, METAL FILM, 1/20W 1K OHM J

Location No.	Parts No.	Description
R303	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R304	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R305	24321129	OXIDE METAL FILM, 1/2W 1.2 OHM J
R306	24382151	OXIDE METAL FILM, 1W 150 OHM J
R307	24322828	OXIDE METAL FILM, 1W 0.82 OHM J
R308	24382391	OXIDE METAL FILM, 1W 390 OHM J
R309	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R310	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R311	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R312	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R313	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R314	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R315	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R317	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R321	24366103	CARBON FILM, 1/6W 10K OHM J
R322	24366101	CARBON FILM, 1/6W 100 OHM J
R323	24366103	CARBON FILM, 1/6W 10K OHM J
R324	24366183	CARBON FILM, 1/6W 18K OHM J
R325	24366113	CARBON FILM, 1/6W 11K OHM J
R326	24366471	CARBON FILM, 1/6W 470 OHM J
R327	24366471	CARBON FILM, 1/6W 470 OHM J
R328	24366562	CARBON FILM, 1/6W 5.6K OHM J
R329	24366103	CARBON FILM, 1/6W 10K OHM J
R331	24366473	CARBON FILM, 1/6W 47K OHM J
R332	24366821	CARBON FILM, 1/6W 820 OHM J
R333	24366102	CARBON FILM, 1/6W 1K OHM J
R334	24366153	CARBON FILM, 1/6W 15K OHM J
R335	24000245	METAL FILM, 1/4W 33K OHM F
R336	24000368	METAL FILM, 1/4W 2.7K OHM F
R337	24000203	METAL FILM, 1/4W 27K F
⚠ R338	24366103	CARBON FILM, 1/6W 10K OHM J
R339	24366472	CARBON FILM, 1/6W 4.7K OHM J
R341	24366472	CARBON FILM, 1/6W 4.7K OHM J
R342	24000633	METAL FILM, 1/4W 10K OHM F
R343	24366103	CARBON FILM, 1/6W 10K OHM J
R344	24366123	CARBON FILM, 1/6W 12K OHM J
R345	24000633	METAL FILM, 1/4W 10K OHM F
R346	24019119	METAL FILM, 1/6W 30K OHM J
R347	24019119	METAL FILM, 1/6W 30K OHM J
R348	24000525	METAL FILM, 1/4W 4.7K OHM F
R349	24366103	CARBON FILM, 1/6W 10K OHM J
R351	24366153	CARBON FILM, 1/6W 15K OHM J
R352	24366273	CARBON FILM, 1/6W 27K OHM J
R353	24366824	CARBON FILM, 1/6W 820K OHM J
R354	24366273	CARBON FILM, 1/6W 27K OHM J
R355	24366822	CARBON FILM, 1/6W 8.2K OHM J
R356	24366102	CARBON FILM, 1/6W 1K OHM J
R357	24366100	CARBON FILM, 1/6W 10 OHM J
R358	24366103	CARBON FILM, 1/6W 10K OHM J
R359	24366392	CARBON FILM, 1/6W 3.9K OHM J
R361	24366123	CARBON FILM, 1/6W 12K OHM J
R362	24366103	CARBON FILM, 1/6W 10K OHM J
R363	24366103	CARBON FILM, 1/6W 10K OHM J
R365	24366682	CARBON FILM, 1/6W 6.8K OHM J
R366	24366103	CARBON FILM, 1/6W 10K OHM J
R367	24366103	CARBON FILM, 1/6W 10K OHM J
R368	24366102	CARBON FILM, 1/6W 1K OHM J
R369	24366103	CARBON FILM, 1/6W 10K OHM J
R371	24366823	CARBON FILM, 1/6W 82K OHM J
R372	24366332	CARBON FILM, 1/6W 3.3K OHM J
R373	24366823	CARBON FILM, 1/6W 82K OHM J
R374	24366104	CARBON FILM, 1/6W 100K OHM J
R375	24366153	CARBON FILM, 1/6W 15K OHM J
R376	24366333	CARBON FILM, 1/6W 33K OHM J
R377	24366103	CARBON FILM, 1/6W 10K OHM J

Location No.	Parts No.	Description
R378	24366682	CARBON FILM, 1/6W 6.8K OHM J
R379	24366103	CARBON FILM, 1/6W 10K OHM J
R381	24366102	CARBON FILM, 1/6W 1K OHM J
R382	24366103	CARBON FILM, 1/6W 10K OHM J
R383	24366222	CARBON FILM, 1/6W 2.2K OHM J
R384	24019090	METAL FILM, 1/4W 330K OHM F
R385	24000633	METAL FILM, 1/4W 10K OHM F
R386	24000639	METAL FILM, 1/4W 22K OHM F
R388	24000141	METAL FILM, 1/4W 220 F
R401	24366223	CARBON FILM, 1/6W 22K OHM J
R402	24366223	CARBON FILM, 1/6W 22K OHM J
R403	24553101	OXIDE METAL FILM, 1W 100 OHM J
R404	24383101	OXIDE METAL FILM, 2W 100 OHM J
R405	24366103	CARBON FILM, 1/6W 10K OHM J
R406	24382222	OXIDE METAL FILM, 1W 2.2K OHM J
R407	24381100	OXIDE METAL FILM, 1/2W 10 OHM J
R408	24366101	CARBON FILM, 1/6W 100 OHM J
R409	24555220	OXIDE METAL FILM, 3W 22 OHM J
R410	24555220	OXIDE METAL FILM, 3W 22 OHM J
R411	24323479	METAL FILM, 2W 4.7 OHM J
R412	24366101	CARBON FILM, 1/6W 100 OHM J
R413	24366272	CARBON FILM, 1/6W 2.7K OHM J
R414	24366101	CARBON FILM, 1/6W 100 OHM J
R415	24533331	FUSIBLE, 2W 330 OHM J
R417	24366101	CARBON FILM, 1/6W 100 OHM J
R418	24366332	CARBON FILM, 1/6W 3.3K OHM J
R419	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R420	24382473	OXIDE METAL FILM, 1W 47K OHM J
R421	24377224	CARBON FILM, 1W 220K OHM J
R422	24376104	CARBON FILM, 1/2W 10OK OHM J
R423	24376104	CARBON FILM, 1/2W 10OK OHM J
R424	24322398	OXIDE METAL FILM, 1W 0.39 OHM J
R425	24366101	CARBON FILM, 1/6W 100 OHM J
R427	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R428	24310109	OXIDE METAL FILM, 1/2W 1 OHM J
R430	24383153	OXIDE METAL FILM, 2W 15K OHM J
R431	24383102	OXIDE METAL FILM, 2W 1K OHM J
R432	24376274	CARBON FILM, 1/2W 270K OHM J
R433	24376274	CARBON FILM, 1/2W 270K OHM J
R434	24376274	CARBON FILM, 1/2W 270K OHM J
R435	24366101	CARBON FILM, 1/6W 100 OHM J
R436	24382561	OXIDE METAL FILM, 1W 560 OHM J
R437	24382561	OXIDE METAL FILM, 1W 560 OHM J
R438	24382561	OXIDE METAL FILM, 1W 560 OHM J
R439	24366103	CARBON FILM, 1/6W 10K OHM J
R440	24366103	CARBON FILM, 1/6W 10K OHM J
R441	24366474	CARBON FILM, 1/6W 470K OHM J
R442	24366103	CARBON FILM, 1/6W 10K OHM J
R443	24366562	CARBON FILM, 1/6W 5.6K OHM J
R444	24366562	CARBON FILM, 1/6W 5.6K OHM J
R445	24366472	CARBON FILM, 1/6W 4.7K OHM J
R446	24366103	CARBON FILM, 1/6W 10K OHM J
R447	24366152	CARBON FILM, 1/6W 1.5K OHM J
R448	24366333	CARBON FILM, 1/6W 33K OHM J
R449	24366223	CARBON FILM, 1/6W 22K OHM J
R451	24366103	CARBON FILM, 1/6W 10K OHM J
R452	24366103	CARBON FILM, 1/6W 10K OHM J
R453	24366472	CARBON FILM, 1/6W 4.7K OHM J
R454	24366562	CARBON FILM, 1/6W 5.6K OHM J
R455	24019259	FUSIBLE, 1/4W 27 OHM G
R456	24366224	CARBON FILM, 1/6W 220K OHM J
R457	24366223	CARBON FILM, 1/6W 22K OHM J
R459	24366392	CARBON FILM, 1/6W 3.9K OHM J
R461	24366103	CARBON FILM, 1/6W 10K OHM J
R462	24366222	CARBON FILM, 1/6W 2.2K OHM J

Location No.	Parts No.	Description
R463	24366103	CARBON FILM, 1/6W 10K OHM J
R464	24366332	CARBON FILM, 1/6W 3.3K OHM J
R465	24366474	CARBON FILM, 1/6W 470K OHM J
R466	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R467	24366472	CARBON FILM, 1/6W 4.7K OHM J
R481	24322568	OXIDE METAL FILM, 1W 0.56 OHM J
R482	24552271	OXIDE METAL FILM, 1/2W 270 OHM J
R483	24552151	OXIDE METAL FILM, 1/2W 150 OHM J
R484	24366102	CARBON FILM, 1/6W 1K OHM J
R485	24000141	METAL FILM, 1/4W 220 F
⚠ R486	24000360	METAL FILM, 1/4W 1.2K OHM F
⚠ R487	24000147	METAL FILM, 1/4W 470 OHM F
R488	24366103	CARBON FILM, 1/6W 10K OHM J
R489	24366100	CARBON FILM, 1/6W 10 OHM J
R505	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R520	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R521	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R522	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R523	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R524	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R525	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R526	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R527	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R530	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R531	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R532	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R533	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R534	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R535	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R536	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R537	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R538	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R539	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R540	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R541	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R542	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R543	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R544	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R545	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R546	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R563	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
R564	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
R565	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
R601	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R602	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R603	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R604	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R609	24366229	CARBON FILM, 1/6W 2.2 OHM J
R610	24366229	CARBON FILM, 1/6W 2.2 OHM J
R611	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R612	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R613	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R661	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R662	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
R663	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R665	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R666	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R667	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R668	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R669	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R671	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R672	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
R673	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R674	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R682	24011473	CHIP, METAL FILM, 1/20W 47K OHM J

Location No.	Parts No.	Description
R683	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R684	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R687	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R689	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R690	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R691	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R692	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R693	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R695	24000445	CHIP JUMPER, 1608TYPE
R702	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R709	24366563	CARBON FILM, 1/6W 56K OHM J
R713	24366273	CARBON FILM, 1/6W 27K OHM J
R715	24366333	CARBON FILM, 1/6W 33K OHM J
R716	24366273	CARBON FILM, 1/6W 27K OHM J
R717	24366333	CARBON FILM, 1/6W 33K OHM J
R718	24366101	CARBON FILM, 1/6W 100 OHM J
R719	24366100	CARBON FILM, 1/6W 10 OHM J
R720	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R722	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R723	24366101	CARBON FILM, 1/6W 100 OHM J
R724	24366151	CARBON FILM, 1/6W 150 OHM J
R725	24366332	CARBON FILM, 1/6W 3.3K OHM J
R730	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R731	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R732	24366470	CARBON FILM, 1/6W 47 OHM J
R733	24366683	CARBON FILM, 1/6W 68K OHM J
R734	24366470	CARBON FILM, 1/6W 47 OHM J
R735	24366683	CARBON FILM, 1/6W 68K OHM J
R736	24553330	OXIDE METAL FILM, 1W 33 OHM J
R737	24366751	CARBON FILM, 1/6W 750 OHM J
R738	24366102	CARBON FILM, 1/6W 1K OHM J
R739	24366751	CARBON FILM, 1/6W 750 OHM J
R740	24553330	OXIDE METAL FILM, 1W 33 OHM J
R741	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R742	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R743	24554221	OXIDE METAL FILM, 2W 220 OHM J
R744	24366122	CARBON FILM, 1/6W 1.2K OHM J
R745	24366122	CARBON FILM, 1/6W 1.2K OHM J
R755	24366333	CARBON FILM, 1/6W 33K OHM J
R761	24366273	CARBON FILM, 1/6W 27K OHM J
R762	24366563	CARBON FILM, 1/6W 56K OHM J
R763	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R764	24366470	CARBON FILM, 1/6W 47 OHM J
R765	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R766	24366470	CARBON FILM, 1/6W 47 OHM J
R767	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R768	24366751	CARBON FILM, 1/6W 750 OHM J
R769	24366122	CARBON FILM, 1/6W 1.2K OHM J
R770	24553330	OXIDE METAL FILM, 1W 33 OHM J
R771	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R772	24366683	CARBON FILM, 1/6W 68K OHM J
R773	24366683	CARBON FILM, 1/6W 68K OHM J
R774	24366751	CARBON FILM, 1/6W 750 OHM J
R775	24366122	CARBON FILM, 1/6W 1.2K OHM J
R776	24553330	OXIDE METAL FILM, 1W 33 OHM J
R777	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R778	24366102	CARBON FILM, 1/6W 1K OHM J
R779	24554221	OXIDE METAL FILM, 2W 220 OHM J
R781	24366273	CARBON FILM, 1/6W 27K OHM J
R782	24366563	CARBON FILM, 1/6W 56K OHM J
R783	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R784	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R785	24366470	CARBON FILM, 1/6W 47 OHM J
R786	24366751	CARBON FILM, 1/6W 750 OHM J
R787	24366122	CARBON FILM, 1/6W 1.2K OHM J

Location No.	Parts No.	Description
R788	24366683	CARBON FILM, 1/6W 68K OHM J
R789	24366683	CARBON FILM, 1/6W 68K OHM J
R790	24366751	CARBON FILM, 1/6W 750 OHM J
R791	24366122	CARBON FILM, 1/6W 1.2K OHM J
R792	24366102	CARBON FILM, 1/6W 1K OHM J
R793	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R794	24553330	OXIDE METAL FILM, 1W 33 OHM J
R795	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R796	24554221	OXIDE METAL FILM, 2W 220 OHM J
R797	24366470	CARBON FILM, 1/6W 47 OHM J
R798	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R799	24553330	OXIDE METAL FILM, 1W 33 OHM J
R810	24045011	CEMENT RES G 20W 1R2J
R818	24366102	CARBON FILM, 1/6W 1K OHM J
R819	24366103	CARBON FILM, 1/6W 10K OHM J
R829	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R840	24552562	OXIDE METAL FILM, 1/2W 5.6K OHM J
R841	24366102	CARBON FILM, 1/6W 1K OHM J
R842	24376563	CARB0N FILM, 1/2W 56K OHM J
R843	24376563	CARB0N FILM, 1/2W 56K OHM J
R844	24366103	CARBON FILM, 1/6W 10K OHM J
R861	24382153	OXIDE METAL FILM, 1W 15K OHM J
R862	24381330	OXIDE FILM, 1/2W 33 J
R864	24552102	OXIDE METAL FILM, 1/2W 1K OHM J
R865	24552470	OXIDE METAL FILM, 1/2W 47 OHM J
R866	24366103	CARBON FILM, 1/6W 10K OHM J
R867	24366223	CARBON FILM, 1/6W 22K OHM J
R868	24552560	OXIDE METAL FILM, 1/2W 56 OHM J
R870	24381271	OXIDE METAL FILM, 1/2W 270 OHM J
R871	24382820	OXIDE METAL FILM, 1W 82 OHM J
R872	24382124	OXIDE METAL FILM, 1W 120K OHM J
R873	24366150	CARBON FILM, 1/6W 15 OHM J
R882	24366101	CARBON FILM, 1/6W 100 OHM J
R883	24381682	OXIDE METAL FILM, 1/2W 6.8K OHM J
R884	24366222	CARBON FILM, 1/6W 2.2K OHM J
R891	24366473	CARBON FILM, 1/6W 47K OHM J
R899	24010001	CARBON FILM, 1/2W 3.9M OHM J
R900	24000907	FUSIBLE, 1W 3.9 OHM J
R901	24366101	CARBON FILM, 1/6W 100 OHM J
R903	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R905	24366270	CARBON FILM, 1/6W 27 OHM J
R906	24366271	CARBON FILM, 1/6W 270 OHM J
R908	24366680	CARBON FILM, 1/6W 68 OHM J
R909	24366180	CARBON FILM, 1/6W 18 OHM J
R911	24366101	CARBON FILM, 1/6W 100 OHM J
R913	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R915	24366270	CARBON FILM, 1/6W 27 OHM J
R916	24366271	CARBON FILM, 1/6W 270 OHM J
R918	24366680	CARBON FILM, 1/6W 68 OHM J
R919	24366180	CARBON FILM, 1/6W 18 OHM J
R920	24366222	CARBON FILM, 1/6W 2.2K OHM J
R921	24366101	CARBON FILM, 1/6W 100 OHM J
R923	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R925	24366180	CARBON FILM, 1/6W 18 OHM J
R926	24366271	CARBON FILM, 1/6W 270 OHM J
R927	24366100	CARBON FILM, 1/6W 10 OHM J
R928	24366680	CARBON FILM, 1/6W 68 OHM J
R929	24366270	CARBON FILM, 1/6W 27 OHM J
R930	24366222	CARBON FILM, 1/6W 2.2K OHM J
R931	24568472	CERAMIC COVERED G 7W 4.7K J
R932	24568472	CERAMIC COVERED G 7W 4.7K J
R933	24366560	CARBON FILM, 1/6W 56 OHM J
R934	24366560	CARBON FILM, 1/6W 56 OHM J
R938	24366150	CARBON FILM, 1/6W 15 OHM J
R941	24568472	CERAMIC COVERED G 7W 4.7K J

Location No.	Parts No.	Description
R942	24568472	CERAMIC COVERED G 7W 4.7K J
R943	24366560	CARBON FILM, 1/6W 56 OHM J
R944	24366560	CARBON FILM, 1/6W 56 OHM J
R945	24366150	CARBON FILM, 1/6W 15 OHM J
R948	24366222	CARBON FILM, 1/6W 2.2K OHM J
R950	24366222	CARBON FILM, 1/6W 2.2K OHM J
R951	24568472	CERAMIC COVERED G 7W 4.7K J
R952	24568472	CERAMIC COVERED G 7W 4.7K J
R953	24366560	CARBON FILM, 1/6W 56 OHM J
R954	24366560	CARBON FILM, 1/6W 56 OHM J
R958	24366150	CARBON FILM, 1/6W 15 OHM J
R961	24366122	CARBON FILM, 1/6W 1.2K OHM J
R962	24366471	CARBON FILM, 1/6W 470 OHM J
R963	24366100	CARBON FILM, 1/6W 10 OHM J
R964	24366332	CARBON FILM, 1/6W 3.3K OHM J
R965	24366101	CARBON FILM, 1/6W 100 OHM J
R966	24366331	CARBON FILM, 1/6W 330 OHM J
R967	24366681	CARBON FILM, 1/6W 680 OHM J
R968	24366222	CARBON FILM, 1/6W 2.2K OHM J
R978	24366222	CARBON FILM, 1/6W 2.2K OHM J
R987	24366101	CARBON FILM, 1/6W 100 OHM J
R988	24366222	CARBON FILM, 1/6W 2.2K OHM J
R991	24366222	CARBON FILM, 1/6W 2.2K OHM J
R992	24366222	CARBON FILM, 1/6W 2.2K OHM J
R995	24366330	CARBON FILM, 1/6W 33 OHM J
R4005	24366102	CARBON FILM, 1/6W 1K OHM J
R4010	24366102	CARBON FILM, 1/6W 1K OHM J
R4011	24366223	CARBON FILM, 1/6W 22K OHM J
R4012	24366223	CARBON FILM, 1/6W 22K OHM J
R4013	24366103	CARBON FILM, 1/6W 10K OHM J
R4014	24366222	CARBON FILM, 1/6W 2.2K OHM J
R4015	24000633	METAL FILM, 1/4W 10K OHM F
R4016	24366105	CARBON FILM, 1/6W 1M OHM J
R4017	24000639	METAL FILM, 1/4W 22K OHM F
R4018	24000203	METAL FILM, 1/4W 27K F
R4020	24000370	METAL FILM, 1/4W 3.3K OHM F
R4021	24000637	METAL FILM, 1/4W 15K OHM F
R4022	24000368	METAL FILM, 1/4W 2.7K OHM F
R4023	24366472	CARBON FILM, 1/6W 4.7K OHM J
R4024	24000203	METAL FILM, 1/4W 27K F
R4025	24000364	METAL FILM, 1/4W 1.8K OHM F
R4026	24383470	OXIDE METAL FILM, 2W 47 OHM J
R4030	24366102	CARBON FILM, 1/6W 1K OHM J
R4031	24366562	CARBON FILM, 1/6W 5.6K OHM J
R4032	24000639	METAL FILM, 1/4W 22K OHM F
R4033	24000147	METAL FILM, 1/4W 470 OHM F
R4034	24066864	VARIABLE RESISTOR
R4035	24000372	METAL FILM, 1/4W 3.9K OHM F
R4036	24366102	CARBON FILM, 1/6W 1K OHM J
R4502	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4503	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4505	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4506	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4507	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4508	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4509	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4513	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4514	24000824	CHIP JUMPER, 2125TYPE
R4515	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
R4516	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4517	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4521	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4522	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4523	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4524	24011103	CHIP, METAL FILM, 1/20W 10K OHM J

Location No.	Parts No.	Description
R4525	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4527	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4528	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4531	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4532	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4533	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
R4534	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4535	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4536	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4538	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4539	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4541	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4542	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R4545	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4546	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4551	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4552	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4553	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R7707	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7708	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7710	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7711	24547189	FUSIBLE, 1W 1.8 OHM J
R7712	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7713	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7715	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7716	24547189	FUSIBLE, 1W 1.8 OHM J
R7717	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7718	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7720	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7721	24547189	FUSIBLE, 1W 1.8 OHM J
R7722	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7723	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7725	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7726	24547189	FUSIBLE, 1W 1.8 OHM J
R7727	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7728	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7730	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7731	24547189	FUSIBLE, 1W 1.8 OHM J
R7732	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7733	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7735	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7736	24547189	FUSIBLE, 1W 1.8 OHM J
R7766	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R7767	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R7775	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7776	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7777	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7778	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7779	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7780	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7781	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7793	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R7797	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7798	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7799	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R7836	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7837	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7841	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7842	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7843	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7844	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7845	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R7846	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7847	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7848	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J

Location No.	Parts No.	Description
R7849	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R7861	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7862	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7864	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7865	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7866	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7867	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7868	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
R7871	24000358	METAL FILM, 1/4W 1K OHM F
R7872	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7880	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7881	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7882	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7883	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7884	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7885	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R7886	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R7887	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7888	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7889	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R7890	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R7891	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R7893	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R7894	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7895	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7896	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7897	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7898	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7899	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7904	24000247	METAL FILM, 1/4W 39K OHM F
R7906	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7910	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R7911	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7912	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7913	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7914	24381182	OXIDE METAL FILM, 1/2W 1.8K OHM J
R9028	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R9085	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R9086	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R9501	24366101	CARBON FILM, 1/6W 100 OHM J
R9503	24366681	CARBON FILM, 1/6W 680 OHM J
R9507	24366330	CARBON FILM, 1/6W 33 OHM J
R9607	24366101	CARBON FILM, 1/6W 100 OHM J
R9608	24366681	CARBON FILM, 1/6W 680 OHM J
R9620	24366330	CARBON FILM, 1/6W 33 OHM J
RA01	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA02	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA06	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA08	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA13	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA14	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA15	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA16	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA18	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA21	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA22	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RA23	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA26	24011333	CHIP, METAL FILM, 1/20W 33K OHM J

Location No.	Parts No.	Description
RA28	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA30	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA32	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RA35	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RA36	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA37	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA38	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA39	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA40	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA41	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA42	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RA43	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA44	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA45	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA46	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA49	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA50	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA51	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA52	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA54	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA55	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA59	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA60	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA71	24366273	CARBON FILM, 1/6W 27K OHM J
RA72	24366153	CARBON FILM, 1/6W 15K OHM J
RA72	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA73	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA73	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RA74	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA75	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA76	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA76	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA77	24366153	CARBON FILM, 1/6W 15K OHM J
RA77	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA78	24366273	CARBON FILM, 1/6W 27K OHM J
RA78	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA79	24366823	CARBON FILM, 1/6W 82K OHM J
RA79	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA80	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA81	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RA021	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA031	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA141	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA161	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA181	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA221	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA361	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA401	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RA431	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA703	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA705	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA708	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RB01	24366391	CARBON FILM, 1/6W 390 OHM J
RB03	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB04	24366473	CARBON FILM, 1/6W 47K OHM J
RB05	24366102	CARBON FILM, 1/6W 1K OHM J
RB05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB14	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RB15	24366471	CARBON FILM, 1/6W 470 OHM J
RB15	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RB16	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RB17	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB19	24366470	CARBON FILM, 1/6W 47 OHM J
RB41	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RB51	24366224	CARBON FILM, 1/6W 220K OHM J

Location No.	Parts No.	Description
RB52	24366123	CARBON FILM, 1/6W 12K OHM J
RB53	24366123	CARBON FILM, 1/6W 12K OHM J
RB54	24366123	CARBON FILM, 1/6W 12K OHM J
RB55	24366224	CARBON FILM, 1/6W 220K OHM J
RB56	24366151	CARBON FILM, 1/6W 150 OHM J
RB57	24366103	CARBON FILM, 1/6W 10K OHM J
RB58	24366103	CARBON FILM, 1/6W 10K OHM J
RB59	24366122	CARBON FILM, 1/6W 1.2K OHM J
RB60	24366224	CARBON FILM, 1/6W 220K OHM J
RB61	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB62	24366272	CARBON FILM, 1/6W 2.7K OHM J
RB62	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB63	24366271	CARBON FILM, 1/6W 270 OHM J
RB64	24366102	CARBON FILM, 1/6W 1K OHM J
RB64	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB65	24366472	CARBON FILM, 1/6W 4.7K OHM J
RB65	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB66	24366473	CARBON FILM, 1/6W 47K OHM J
RB67	24366221	CARBON FILM, 1/6W 220 OHM J
RB69	24366272	CARBON FILM, 1/6W 2.7K OHM J
RB70	24366331	CARBON FILM, 1/6W 330 OHM J
RB71	24366109	CARBON FILM, 1/6W 1 OHM J
RB72	24366220	CARBON FILM, 1/6W 22 OHM J
RB73	24366560	CARBON FILM, 1/6W 56 OHM J
RB74	24366104	CARBON FILM, 1/6W 100K OHM J
RB81	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RB82	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB83	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB84	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RB90	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB91	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RB92	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB93	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB94	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB95	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB96	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB97	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB98	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB031	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB032	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB033	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB051	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB052	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB512	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RB551	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB552	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB553	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RC01	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC02	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC03	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RC05	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC06	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC07	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC08	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC10	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RC11	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RC12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RD01	24366101	CARBON FILM, 1/6W 100 OHM J
RD02	24366105	CARBON FILM, 1/6W 1M OHM J
RD03	24366101	CARBON FILM, 1/6W 100 OHM J
RD04	24366101	CARBON FILM, 1/6W 100 OHM J
RD05	24366101	CARBON FILM, 1/6W 100 OHM J
RD06	24366472	CARBON FILM, 1/6W 4.7K OHM J
RD07	24366332	CARBON FILM, 1/6W 3.3K OHM J

Location No.	Parts No.	Description
RD09	24366104	CARBON FILM, 1/6W 100K OHM J
RD11	24366104	CARBON FILM, 1/6W 100K OHM J
RD12	24366101	CARBON FILM, 1/6W 100 OHM J
RD13	24366104	CARBON FILM, 1/6W 100K OHM J
RD14	24366221	CARBON FILM, 1/6W 220 OHM J
RD15	24366104	CARBON FILM, 1/6W 100K OHM J
RD16	24366123	CARBON FILM, 1/6W 12K OHM J
RD17	24366101	CARBON FILM, 1/6W 100 OHM J
RD18	24366105	CARBON FILM, 1/6W 1M OHM J
RD19	24366101	CARBON FILM, 1/6W 100 OHM J
RD21	24366332	CARBON FILM, 1/6W 3.3K OHM J
RD41	24366123	CARBON FILM, 1/6W 12K OHM J
RD42	24366333	CARBON FILM, 1/6W 33K OHM J
RD43	24366272	CARBON FILM, 1/6W 2.7K OHM J
RD44	24366123	CARBON FILM, 1/6W 12K OHM J
RD45	24366333	CARBON FILM, 1/6W 33K OHM J
RD46	24366272	CARBON FILM, 1/6W 2.7K OHM J
RD47	24366104	CARBON FILM, 1/6W 100K OHM J
RD48	24366103	CARBON FILM, 1/6W 10K OHM J
RD49	24366562	CARBON FILM, 1/6W 5.6K OHM J
RD60	24366682	CARBON FILM, 1/6W 6.8K OHM J
RD61	24366682	CARBON FILM, 1/6W 6.8K OHM J
RD62	24366109	CARBON FILM, 1/6W 1 OHM J
RD72	24366101	CARBON FILM, 1/6W 100 OHM J
RD73	24366101	CARBON FILM, 1/6W 100 OHM J
RD74	24366101	CARBON FILM, 1/6W 100 OHM J
RD75	24366473	CARBON FILM, 1/6W 47K OHM J
RD76	24366122	CARBON FILM, 1/6W 1.2K OHM J
RD77	24366473	CARBON FILM, 1/6W 47K OHM J
RD78	24366122	CARBON FILM, 1/6W 1.2K OHM J
RD79	24366123	CARBON FILM, 1/6W 12K OHM J
RD81	24366123	CARBON FILM, 1/6W 12K OHM J
RD83	24366103	CARBON FILM, 1/6W 10K OHM J
RD85	24366223	CARBON FILM, 1/6W 22K OHM J
RD86	24366223	CARBON FILM, 1/6W 22K OHM J
RD87	24366223	CARBON FILM, 1/6W 22K OHM J
RD88	24366223	CARBON FILM, 1/6W 22K OHM J
RH002	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH003	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH004	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH005	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH006	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH007	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH008	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH009	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH041	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH042	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH043	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH044	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH051	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RH061	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
RH062	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH063	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH064	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH201	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH202	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH205	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH206	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH207	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RH208	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH209	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH210	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH211	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH212	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH301	24011684	CHIP, METAL FILM, 1/20W 680K OHM J

Location No.	Parts No.	Description
RH302	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH303	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RH304	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RH305	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH306	24011684	CHIP, METAL FILM, 1/20W 680K OHM J
RH307	24011684	CHIP, METAL FILM, 1/20W 680K OHM J
RH308	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH309	24011203	CHIP, METAL FILM, 1/20W 20K OHM J
RH310	24011203	CHIP, METAL FILM, 1/20W 20K OHM J
RH311	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH312	24011684	CHIP, METAL FILM, 1/20W 680K OHM J
RH313	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH314	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH315	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH316	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH317	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH318	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH319	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH320	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH321	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH322	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH323	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH324	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH325	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RH326	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RH327	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH328	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH329	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH330	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH331	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH332	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH333	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH334	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH335	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH336	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH337	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH338	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH339	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH340	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH341	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH342	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH343	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH344	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH345	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH346	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH347	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH401	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH402	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH404	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH405	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH406	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH407	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH408	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH412	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH413	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH414	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH415	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH416	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH417	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH420	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RH421	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RH422	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH425	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RH427	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RH428	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J

Location No.	Parts No.	Description
RH429	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RH430	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH431	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH501	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH502	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH503	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH504	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH506	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH507	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH508	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH509	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH521	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH522	24998103	CHIP, 1/16W 10K OHM
RH523	24998103	CHIP, 1/16W 10K OHM
RH524	24998103	CHIP, 1/16W 10K OHM
RH525	24998103	CHIP, 1/16W 10K OHM
RH526	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH527	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH528	24998103	CHIP, 1/16W 10K OHM
RH529	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH541	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH542	24998103	CHIP, 1/16W 10K OHM
RH543	24998103	CHIP, 1/16W 10K OHM
RH544	24998103	CHIP, 1/16W 10K OHM
RH545	24998103	CHIP, 1/16W 10K OHM
RH546	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH547	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH548	24998103	CHIP, 1/16W 10K OHM
RH549	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH561	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH562	24998103	CHIP, 1/16W 10K OHM
RH563	24998103	CHIP, 1/16W 10K OHM
RH564	24998103	CHIP, 1/16W 10K OHM
RH565	24998103	CHIP, 1/16W 10K OHM
RH566	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH567	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH568	24998103	CHIP, 1/16W 10K OHM
RH569	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH621	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH622	24998103	CHIP, 1/16W 10K OHM
RH623	24998103	CHIP, 1/16W 10K OHM
RH624	24998103	CHIP, 1/16W 10K OHM
RH625	24998103	CHIP, 1/16W 10K OHM
RH626	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH627	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH628	24998103	CHIP, 1/16W 10K OHM
RH629	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH641	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH642	24998103	CHIP, 1/16W 10K OHM
RH643	24998103	CHIP, 1/16W 10K OHM
RH644	24998103	CHIP, 1/16W 10K OHM
RH645	24998103	CHIP, 1/16W 10K OHM
RH646	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH647	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH648	24998103	CHIP, 1/16W 10K OHM
RH649	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH661	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH662	24998103	CHIP, 1/16W 10K OHM
RH663	24998103	CHIP, 1/16W 10K OHM
RH664	24998103	CHIP, 1/16W 10K OHM
RH665	24998103	CHIP, 1/16W 10K OHM
RH666	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH667	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH668	24998103	CHIP, 1/16W 10K OHM
RH669	24011911	CHIP, METAL FILM, 1/20W 910 OHM J

Location No.	Parts No.	Description
RR15	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RR16	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RR17	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RR52	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR53	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RR54	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR55	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RR56	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR57	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RR61	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RR61	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RR62	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RR62	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RR63	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RR63	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS02	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS06	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS07	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS08	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS10	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS12	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS21	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS22	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS25	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS26	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS27	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RS28	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RS29	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS30	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS31	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS32	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS33	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS34	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS35	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS36	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS37	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS40	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS42	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS48	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS49	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS51	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS52	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS53	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS54	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS91	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS92	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS93	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS94	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS120	24552821	OXIDE METAL FILM, 1/2W 820 OHM J
RS121	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS122	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS123	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS124	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS125	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS651	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS652	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS665	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS671	24000445	CHIP JUMPER, 1608TYPE
RS672	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RS673	24000445	CHIP JUMPER, 1608TYPE
RS674	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RS675	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS676	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
RS683	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS685	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS686	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS687	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV01	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV04	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV11	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV12	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV13	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV15	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV20	24366750	CARBON FILM, 1/6W 75 OHM J
RV21	24366750	CARBON FILM, 1/6W 75 OHM J
RV22	24366750	CARBON FILM, 1/6W 75 OHM J
RV23	24366332	CARBON FILM, 1/6W 3.3K OHM J
RV24	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV25	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV26	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV31	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV31	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RV32	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV32	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV38	24872184	CHIP, METAL FILM, 1/16W 180K OHM J
RV39	24872334	CHIP, METAL FILM, 1/16W 330K OHM J
RV50	24872472	CHIP, METAL FILM, 1/16W 4.7K OHM J
RV51	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV63	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV64	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV65	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV67	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV70	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV74	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV81	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV83	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RV84	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV85	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV86	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV87	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RV89	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RV91	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV92	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV93	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV94	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV95	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RV97	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RV117	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV118	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV119	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV124	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RV125	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RV126	24011274	CHIP, METAL FILM, 1/20W 270K OHM J
RV127	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RV128	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV140	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV141	24011302	CHIP, METAL FILM, 1/20W 3K OHM J
RV142	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV143	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV144	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV169	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV178	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RV179	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV180	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV181	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV182	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV183	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV184	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RV185	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RV186	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RW10	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RW12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW30	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW31	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW32	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW33	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RW34	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RW40	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RW45	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RX11	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RX12	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RY81	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY82	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J

COILS & TRANSFORMERS

L101	23289845	COIL, PEAKING 68.00MMHJ, COLTRF4680AT
L103	23289844	COIL, PEAKING, TRF4470AT
L111	23289845	COIL, PEAKING 68.00MMHJ, COLTRF4680AT
L113	23289842	COIL, PEAKING, TRF4220AT
L115	23103852	COIL, FILTER, TEM2028AH
L121	23238562	COIL, PEAKING, TRF4109AJ
L122	23238562	COIL, PEAKING, TRF4109AJ
L201	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L202	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L203	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L204	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L205	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L206	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L207	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L208	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L209	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L210	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L211	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L212	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L213	23246190	CHIP-INDUCTOR-R39MMHJ, TRF4R39CG
L214	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L215	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L216	23246190	CHIP-INDUCTOR-R39MMHJ, TRF4R39CG
L217	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L218	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L219	23246190	CHIP-INDUCTOR-R39MMHJ, TRF4R39CG
L220	23246195	COIL, CHIP INDUCTOR, TRF41R0CG
L221	23246195	COIL, CHIP INDUCTOR, TRF41R0CG
L222	23246195	COIL, CHIP INDUCTOR, TRF41R0CG
L301	23237975	COIL, PEAKING, TRF4101AC
L302	23248073	COIL, CHOKE, TLN3299D
L303	23248073	COIL, CHOKE, TLN3299D
L304	23103859	COIL, CHOKE, TEM2011
L305	23103775	COIL, FERRITE CHOKE, TEM2014
L401	23289560	COIL, PEAKING, TRF4560AF
L402	23103880	COIL, CHOKE, TEM2011Y

Location No.	Parts No.	Description
⚠ L403	23248248	COIL, CHOKE, TLN3500AH
L404	23248191	COIL, CHOKE, TLN3351AD
L405	23103775	COIL, FERRITE CHOKE, TEM2014
L406	23103775	COIL, FERRITE CHOKE, TEM2014
L410	23289120	COIL, PEAKING, TRF4120AF
⚠ L441	23233995	COIL, LINEARITY, TLN2215AG
L450	23237975	COIL, PEAKING, TRF4101AC
⚠ L462	23231325	COIL, DEFLECTION YOKE, TDY707PS
⚠ L463	23231325	COIL, DEFLECTION YOKE, TDY707PS
⚠ L464	23231325	COIL, DEFLECTION YOKE, TDY707PS
L472	23102499	MAGNET, CPM29.1VM, MAG-1119
L473	23102499	MAGNET, CPM29.1VM, MAG-1119
L474	23102499	MAGNET, CPM29.1VM, MAG-1119
L502	23289120	COIL, PEAKING, TRF4120AF
L503	23289120	COIL, PEAKING, TRF4120AF
L510	23103845	COIL, COMMONMODE, TEM2030AY
L511	23103845	COIL, COMMONMODE, TEM2030AY
L701	23237987	COIL, PEAKING, TRF4100AC
L702	23261974	COIL, FERRITE BEAD, HC5-035
L704	23103859	COIL, CHOKE, TEM2011
L705	23103859	COIL, CHOKE, TEM2011
L762	23103859	COIL, CHOKE, TEM2011
L764	23103859	COIL, CHOKE, TEM2011
L765	23103859	COIL, CHOKE, TEM2011
L766	23261974	COIL, FERRITE BEAD, HC5-035
L769	23237987	COIL, PEAKING, TRF4100AC
L780	23237987	COIL, PEAKING, TRF4100AC
L781	23103859	COIL, CHOKE, TEM2011
L782	23103859	COIL, CHOKE, TEM2011
L783	23261974	COIL, FERRITE BEAD, HC5-035
L801	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L802	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L813	23103880	COIL, CHOKE, TEM2011Y
L821	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L822	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L823	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L840	23280019	COIL, PEAKING, TRF4330AZ
L851	23103880	COIL, CHOKE, TEM2011Y
L852	23103880	COIL, CHOKE, TEM2011Y
L853	23103880	COIL, CHOKE, TEM2011Y
L854	23103880	COIL, CHOKE, TEM2011Y
L861	23103880	COIL, CHOKE, TEM2011Y
L862	23103880	COIL, CHOKE, TEM2011Y
L881	23103880	COIL, CHOKE, TEM2011Y
L882	23103880	COIL, CHOKE, TEM2011Y
L885	23248073	COIL, CHOKE, TLN3299D
L888	23103880	COIL, CHOKE, TEM2011Y
L889	23103880	COIL, CHOKE, TEM2011Y
L891	23103880	COIL, CHOKE, TEM2011Y
L892	23103880	COIL, CHOKE, TEM2011Y
L893	23103880	COIL, CHOKE, TEM2011Y
L894	23103880	COIL, CHOKE, TEM2011Y
L895	23248247	COIL, CHOKE, TLN3499AH
L896	23248235	COIL, CHOKE 12X18H 22MMH 4.2A, TLN3462AF
L897	23248087	COIL, CHOKE, TLN3312D
L898	23248087	COIL, CHOKE, TLN3312D
L902	23289159	COIL, PEAKING 1.5MMH J 0405, TRF41R5AF
L904	23289120	COIL, PEAKING, TRF4120AF
L905	23289689	COIL, PEAKING, TRF46R8AF

Location No.	Parts No.	Description
L911	23289100	COIL, PEAKING, TRF4100AF
L913	23289159	COIL, PEAKING 1.5MMH J 0405, TRF41R5AF
L915	23289689	COIL, PEAKING, TRF46R8AF
L916	23289120	COIL, PEAKING, TRF4120AF
L923	23289159	COIL, PEAKING 1.5MMH J 0405, TRF41R5AF
L924	23289120	COIL, PEAKING, TRF4120AF
L925	23289689	COIL, PEAKING, TRF46R8AF
L961	23289100	COIL, PEAKING, TRF4100AF
L7701	23103859	COIL, CHOKE, TEM2011
L7702	23103859	COIL, CHOKE, TEM2011
L7703	23103859	COIL, CHOKE, TEM2011
L7704	23103859	COIL, CHOKE, TEM2011
L7705	23103859	COIL, CHOKE, TEM2011
L7706	23103859	COIL, CHOKE, TEM2011
L7708	23103859	COIL, CHOKE, TEM2011
L7709	23103859	COIL, CHOKE, TEM2011
L7710	23248195	COIL, CHOKE, TLN3441AT
L7711	23248195	COIL, CHOKE, TLN3441AT
L7712	23248031	COIL, CHOKE, TLN3274D
L7713	23248031	COIL, CHOKE, TLN3274D
LB51	23237987	COIL, PEAKING, TRF4100AC
LB52	23237987	COIL, PEAKING, TRF4100AC
LC01	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
LH001	23103864	COIL, FILTER, TEM2103T
LH002	23103864	COIL, FILTER, TEM2103T
LH003	23103859	COIL, CHOKE, TEM2011
LH004	23103859	COIL, CHOKE, TEM2011
LH005	23103859	COIL, CHOKE, TEM2011
LH009	23103795	IMPEDER, MMZ2012S301A
LH010	23103795	IMPEDER, MMZ2012S301A
LH012	23103859	COIL, CHOKE, TEM2011
LH061	23103864	COIL, FILTER, TEM2103T
LH062	23103864	COIL, FILTER, TEM2103T
LH063	23103864	COIL, FILTER, TEM2103T
LH064	23103864	COIL, FILTER, TEM2103T
LH065	23103864	COIL, FILTER, TEM2103T
LH066	23103864	COIL, FILTER, TEM2103T
LH067	23103864	COIL, FILTER, TEM2103T
LH122	23103864	COIL, FILTER, TEM2103T
LH124	23103864	COIL, FILTER, TEM2103T
LH125	23103864	COIL, FILTER, TEM2103T
LH126	23103864	COIL, FILTER, TEM2103T
LH301	23103859	COIL, CHOKE, TEM2011
LH302	23103859	COIL, CHOKE, TEM2011
LH401	23245830	COIL, CHIP, TRF4100CB
LH402	23103864	COIL, FILTER, TEM2103T
LH403	23103864	COIL, FILTER, TEM2103T
LH404	23103864	COIL, FILTER, TEM2103T
LH405	23103864	COIL, FILTER, TEM2103T
LH411	23103864	COIL, FILTER, TEM2103T
LH521	23289102	COIL. PEAKING, TRF4102AF
LH522	23289471	COIL, PEAKING, TRF4471AF
LH541	23289102	COIL. PEAKING, TRF4102AF
LH542	23289471	COIL, PEAKING, TRF4471AF
LH561	23289102	COIL. PEAKING, TRF4102AF
LH562	23289471	COIL, PEAKING, TRF4471AF
LH621	23289102	COIL. PEAKING, TRF4102AF
LH622	23289471	COIL, PEAKING, TRF4471AF
LH641	23289102	COIL. PEAKING, TRF4102AF
LH642	23289471	COIL, PEAKING, TRF4471AF
LH661	23289102	COIL. PEAKING, TRF4102AF
LH662	23289471	COIL, PEAKING, TRF4471AF
LH800	23103795	IMPEDER, MMZ2012S301A
LS90	23289100	COIL, PEAKING, TRF4100AF

Location No.	Parts No.	Description
LV05	23289560	COIL, PEAKING, TRF4560AF
LV06	23289560	COIL, PEAKING, TRF4560AF
LV10	23289100	COIL, PEAKING, TRF4100AF
LV13	23289100	COIL, PEAKING, TRF4100AF
LV14	23289100	COIL, PEAKING, TRF4100AF
LV20	23238705	COIL, PEAKING, TRF4560AJ
LV81	23289100	COIL, PEAKING, TRF4100AF
LY22	23103824	COIL, FILTER, TEM2028K
LY80	23289100	COIL, PEAKING, TRF4100AF
T400	23224364	TRANSFORMER, FOCUS, TLN2168AH
T401	23224371	TRANSFORMER, HORIZ DRIVE, TLN1080AH
⚠ T461A	23192961	ANODE CAP ASSY, TCC5605AU
T802	23211759	COIL, LF LH35V 21990A
T840	23217431	TRANSFORMER, CONVERTER, TPW3425AH
T862	23217560	CONV EER40 50H82, TPW3500AS
SEMICONDUCTORS		
Q151	23205123	TRANSISTOR, 2SA933ASQ
Q152	23314204	TRANSISTOR, 2SC2412K,Q
Q171	23205057	TRANSISTOR, KTC3875Y
Q172	23205057	TRANSISTOR, KTC3875Y
Q201	23009234	IC,TI TFP501
Q201	23205057	TRANSISTOR, KTC3875Y
Q202	23009233	IC, TI THS8200
Q203	23009238	IC, TMP87C809M-xxxx
Q204	23009235	IC,EPM3032A
Q205	23205151	TRANSISTOR, FET, BSN20
Q206	23205151	TRANSISTOR, FET, BSN20
Q207	23314163	TRANSISTOR, 2SA1162-Y
Q208	23314163	TRANSISTOR, 2SA1162-Y
Q209	23314163	TRANSISTOR, 2SA1162-Y
Q210	23314204	TRANSISTOR, 2SC2412K,Q
Q211	23205151	TRANSISTOR, FET, BSN20
Q212	70114402	TRANSISTOR, 2SC3437-Y
Q213	23314204	TRANSISTOR, 2SC2412K,Q
Q221	23114756	TRANSISTOR, 2SC2482
Q301	23319787	IC, LA7833S
Q301B	70391355	SCREW, 3X8MM
Q302	23205054	TRANSISTOR, KTA1504Y
Q305	23904896	IC, JLC1562BF
Q321	70119059	IC, OP AMP, TA75902P(J)
Q322	23905266	IC, TA8859CP
Q323	23314965	TRANSISTOR, KTC3198 Y
Q324	70119059	IC, OP AMP, TA75902P(J)
Q325	23314965	TRANSISTOR, KTC3198 Y
Q326	23314962	TRANSISTOR, KTA1266 Y
Q327	23314965	TRANSISTOR, KTC3198 Y
Q328	23114462	TRANSISTOR, RN1202
Q329	23114461	TRANSISTOR, RN1203
Q400	23205079	TRANSISTOR, 2SC4686A
Q401	23205166	TRANSISTOR, FET, 2SK2962
Q402	23314962	TRANSISTOR, KTA1266 Y
Q403	23314965	TRANSISTOR, KTC3198 Y
Q404	23205149	TRANSISTOR, 2SC5859(FA)
Q404B	72471082	SCREW, 3X10MM
Q404D	23850638	INSULATOR, TRANSISTOR, AC263(NO SERVICE PART)
Q405	23114437	TRANSISTOR, 2SC752GTM-Y
Q406	70128158	IC, BA10393
Q407	23319808	IC, M5218AP
Q408	23205031	TRANSISTOR, FET, 2SK2920
Q409	23314965	TRANSISTOR, KTC3198 Y
Q410	23319203	IC, MC7812CT
Q411	23114756	TRANSISTOR, 2SC2482
Q420	23316816	IC, LA7860

Location No.	Parts No.	Description
Q421	23114437	TRANSISTOR, 2SC752GTM-Y
Q431	70114402	TRANSISTOR, 2SC3437-Y
Q432	70114402	TRANSISTOR, 2SC3437-Y
Q434	70114402	TRANSISTOR, 2SC3437-Y
Q435	70114402	TRANSISTOR, 2SC3437-Y
Q436	23205057	TRANSISTOR, KTC3875Y
Q437	23000370	IC, TA1318N
Q510	23009251	IC, TA1360N(MOD)
Q520	23205123	TRANSISTOR, 2SA933ASQ
Q521	23205123	TRANSISTOR, 2SA933ASQ
Q522	23205123	TRANSISTOR, 2SA933ASQ
Q523	23205057	TRANSISTOR, KTC3875Y
Q524	23114502	TRANSISTOR, RN1401
Q525	23114502	TRANSISTOR, RN1401
Q526	23114502	TRANSISTOR, RN1401
Q527	23205054	TRANSISTOR, KTA1504Y
Q528	23205054	TRANSISTOR, KTA1504Y
Q529	23205054	TRANSISTOR, KTA1504Y
Q601	23000269	IC, TA8216H
Q601B	70391356	SCREW, BITTB3X10 SZN
Q612	23205054	TRANSISTOR, KTA1504Y
Q661	70114396	TRANSISTOR, 2SC3326B
Q662	70114396	TRANSISTOR, 2SC3326B
Q663	23906597	IC, BA4558F
Q664	23114493	TRANSISTOR, RN2404
Q681	70114396	TRANSISTOR, 2SC3326B
Q682	70114396	TRANSISTOR, 2SC3326B
Q683	23205057	TRANSISTOR, KTC3875Y
Q706	23114528	TRANSISTOR, 2SC1740S
Q707	23114437	TRANSISTOR, 2SC752GTM-Y
Q709	23114528	TRANSISTOR, 2SC1740S
Q710	23205123	TRANSISTOR, 2SA933ASQ
Q711	23314909	TRANSISTOR, 2SA1837
Q711B	23712306	SCREW, PP3X.5X6SZN
Q712	23314912	TRANSISTOR, 2SC4793
Q712B	23712306	SCREW, PP3X.5X6SZN
Q719	23114528	TRANSISTOR, 2SC1740S
Q720	23114528	TRANSISTOR, 2SC1740S
Q751	23905094	IC, STK392-110
Q752	23905094	IC, STK392-110
Q755	23906689	IC, PQ05RR11
Q760	23205123	TRANSISTOR, 2SA933ASQ
Q761	23314909	TRANSISTOR, 2SA1837
Q761B	23712306	SCREW, PP3X.5X6SZN
Q764	23319720	IC, TC74HC14AF
Q765	23205057	TRANSISTOR, KTC3875Y
Q766	23205057	TRANSISTOR, KTC3875Y
Q767	23904442	IC, TC74HC4066AF
Q769	23114528	TRANSISTOR, 2SC1740S
Q771	23314912	TRANSISTOR, 2SC4793
Q771	23319267	IC, AN79M12F
Q771B	23712306	SCREW, PP3X.5X6SZN
Q772	23205054	TRANSISTOR, KTA1504Y
Q776	23205057	TRANSISTOR, KTC3875Y
Q777	23205054	TRANSISTOR, KTA1504Y
Q778	23205057	TRANSISTOR, KTC3875Y
Q779	23114528	TRANSISTOR, 2SC1740S
Q779	23205057	TRANSISTOR, KTC3875Y
Q780	23205054	TRANSISTOR, KTA1504Y
Q781	23114528	TRANSISTOR, 2SC1740S
Q781	23205057	TRANSISTOR, KTC3875Y
Q782	23205123	TRANSISTOR, 2SA933ASQ
Q782	23318840	IC, AN79M05F
Q783	23114528	TRANSISTOR, 2SC1740S
Q783	23205037	TRANSISTOR, 2SJ512, -250V,-5A,30W

Location No.	Parts No.	Description
Q784	23314909	TRANSISTOR, 2SA1837
Q784B	23712306	SCREW, PP3X.5X6SZN
Q785	23314912	TRANSISTOR, 2SC4793
Q785B	23712306	SCREW, PP3X.5X6SZN
Q792	23906429	IC, TC74HC123AF
Q793	23205031	TRANSISTOR, FET, 2SK2920
Q796	23205057	TRANSISTOR, KTC3875Y
Q797	23906164	IC, TA75S393F
Q798	23318537	IC, TC4S66F
Q799	23318537	IC, TC4S66F
Q801	23009236	IC,TI TPS76918
Q801	23135013	IC, STR-Z4317
Q820	23906484	IC, BA033T
Q822	70129444	IC, PST994D
Q830	23000804	IC, +9V 2% REG. TO220, SI-3090J(LF1
Q831	23319941	IC, SI-3050C
Q832	23000805	IC, SI-3033CA(LF1101)
Q840	23906133	IC, MIP280
Q841	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q842	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q843	23314965	TRANSISTOR, KTC3198 Y
Q862	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q881	23319693	IC, SE116N, LF4
Q901	23205159	TRANSISTOR, NPN VCBO=300V
Q902	23205165	TRANSISTOR, NPN VCBO=30V
Q904	23205158	TRANSISTOR, NPN VCBO=300V
Q905	23205156	TRANSISTOR, PNP VCBO=-300
Q911	23205159	TRANSISTOR, NPN VCBO=300V
Q912	23205165	TRANSISTOR, NPN VCBO=30V
Q913	23314962	TRANSISTOR, KTA1266 Y
Q914	23205158	TRANSISTOR, NPN VCBO=300V
Q915	23205156	TRANSISTOR, PNP VCBO=-300
Q921	23205159	TRANSISTOR, NPN VCBO=300V
Q922	23205165	TRANSISTOR, NPN VCBO=30V
Q924	23205158	TRANSISTOR, NPN VCBO=300V
Q925	23205156	TRANSISTOR, PNP VCBO=-300
Q961	23314965	TRANSISTOR, KTC3198 Y
Q962	23314962	TRANSISTOR, KTA1266 Y
Q973	23314962	TRANSISTOR, KTA1266 Y
QA01	23009282	IC, MCU 1CHIP 16BIT 4M 64, MN102H85KFF
QA02	23906642	IC, AT24C64-10PC
QA70	23319935	IC, MM1096BS
QA71	23205057	TRANSISTOR, KTC3875Y
QA72	23205057	TRANSISTOR, KTC3875Y
QA80	23906295	IC, UPC29M33HB
QA81	70200563	IC, RESET VS=2.9V, PST9129
QB01	23114528	TRANSISTOR, 2SC1740S
QB03	23114498	TRANSISTOR, RN1405
QB05	23205057	TRANSISTOR, KTC3875Y
QB14	23205057	TRANSISTOR, KTC3875Y
QB15	23205057	TRANSISTOR, KTC3875Y
QB30	23314965	TRANSISTOR, KTC3198 Y
QB51	23319808	IC, M5218AP
QB52	23314965	TRANSISTOR, KTC3198 Y
QB53	23314962	TRANSISTOR, KTA1266 Y
QB54	23314962	TRANSISTOR, KTA1266 Y
QB55	23205057	TRANSISTOR, KTC3875Y
QB55	23314965	TRANSISTOR, KTC3198 Y
QB61	70114402	TRANSISTOR, 2SC3437-Y
QB81	70114396	TRANSISTOR, 2SC3326B
QB82	70114396	TRANSISTOR, 2SC3326B
QB83	23205054	TRANSISTOR, KTA1504Y
QB84	23205057	TRANSISTOR, KTC3875Y
QB85	23205054	TRANSISTOR, KTA1504Y
QB86	23205054	TRANSISTOR, KTA1504Y

Location No.	Parts No.	Description
QB87	23205054	TRANSISTOR, KTA1504Y
QB88	23205054	TRANSISTOR, KTA1504Y
QC01	23000040	IC, 4K BIT CMOS EEPROM, AT24C04N10SC
QC02	23205151	TRANSISTOR, FET, BSN20
QC03	23205151	TRANSISTOR, FET, BSN20
QC04	23000040	IC, 4K BIT CMOS EEPROM, AT24C04N10SC
QC05	23314204	TRANSISTOR, 2SC2412K,Q
QD01	23009142	IC, NJM1136D
QD41	23000725	IC, NJM2700L
QD42	23314085	TRANSISTOR, FET, 2SK372 V
QD44	23114460	TRANSISTOR, RN1204
QD45	23114460	TRANSISTOR, RN1204
QD81	23114466	TRANSISTOR, RN2204
QD82	23114623	TRANSISTOR, 2SC2878-A(TEM
QD83	23114623	TRANSISTOR, 2SC2878-A(TEM
QH001	23000380	IC, TC190C060AF-301(Z)
QH004	23319595	IC, TC74HC244AF
QH005	23905013	IC, TLC2932IPW
QH006	23906908	IC, MC33078D
QH173	23905666	IC, AT24C1610PC
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH305	23906585	IC, QUAD OP-AMP DMP14 14P, NJM2058M
QH306	23906585	IC, QUAD OP-AMP DMP14 14P, NJM2058M
QH307	23906585	IC, QUAD OP-AMP DMP14 14P, NJM2058M
QH308	23906429	IC, TC74HC123AF
QH309	23906429	IC, TC74HC123AF
QH401	23009185	IC, MCU 1CHIP 8BIT 8M 42P, 8700CPN-3R14
QH402	70119743	IC, PST523D
QH404	23318977	IC, MC14052BF
QH405	23319595	IC, TC74HC244AF
QH406	23205054	TRANSISTOR, KTA1504Y
QH501	23009177	IC, D/A CONVERTER 6CH IN, CD0031AMT
QH520	23906909	IC, MC33079D
QH540	23906909	IC, MC33079D
QH560	23906909	IC, MC33079D
QR14	23205054	TRANSISTOR, KTA1504Y
QR15	23205054	TRANSISTOR, KTA1504Y
QR16	23205054	TRANSISTOR, KTA1504Y
QS01	70114396	TRANSISTOR, 2SC3326B
QS107	23904896	IC, JLC1562BF
QS108	23205057	TRANSISTOR, KTC3875Y
QS11	70114396	TRANSISTOR, 2SC3326B
QS12	23114493	TRANSISTOR, RN2404
QS120	23906597	IC, BA4558F
QS13	23314204	TRANSISTOR, 2SC2412K,Q
QS14	23314204	TRANSISTOR, 2SC2412K,Q
QS90	23000529	IC, SW 2IN 1OUT 3CIRCUIT 0 CLP, MM1231XD
QV01	23905539	IC, TA8851CN
QV10	23314204	TRANSISTOR, 2SC2412K,Q
QV20	23114499	TRANSISTOR, RN1404
QV21	23314204	TRANSISTOR, 2SC2412K,Q
QV22	23205045	TRANSISTOR, 2SA1037AKQ
QV23	23205045	TRANSISTOR, 2SA1037AKQ
QV28	23114500	TRANSISTOR, RN1403
QV30	23905590	IC, M52055FP
QV31	23205057	TRANSISTOR, KTC3875Y
QV37	23205054	TRANSISTOR, KTA1504Y
QV38	23205054	TRANSISTOR, KTA1504Y

Location No.	Parts No.	Description
QV39	23205054	TRANSISTOR, KTA1504Y
QV48	23114433	TRANSISTOR, 2SC1815-Y
QV49	23114433	TRANSISTOR, 2SC1815-Y
QV61	23205054	TRANSISTOR, KTA1504Y
QV81	23318438	IC, M52055P
QV83	23205057	TRANSISTOR, KTC3875Y
QV91	23205057	TRANSISTOR, KTC3875Y
QW04	23205057	TRANSISTOR, KTC3875Y
QW05	23205057	TRANSISTOR, KTC3875Y
QW08	23205057	TRANSISTOR, KTC3875Y
QW10	23205057	TRANSISTOR, KTC3875Y
QW11	23205057	TRANSISTOR, KTC3875Y
QW17	23114502	TRANSISTOR, RN1401
QY260	23314204	TRANSISTOR, 2SC2412K,Q
D101	23316755	DIODE, ZENER, MTZJ33C
D201	23118041	DIODE, MA111
D202	23118041	DIODE, MA111
D203	23118041	DIODE, MA111
D204	23118041	DIODE, MA111
D205	23316573	DIODE, ZENER, MA8062-L
D206	23316573	DIODE, ZENER, MA8062-L
D215	23118041	DIODE, MA111
D216	23118041	DIODE, MA111
D217	23118041	DIODE, MA111
D218	23118041	DIODE, MA111
D219	23118041	DIODE, MA111
D220	23118041	DIODE, MA111
D260	23118094	DIODE, EU2A
D301	23118094	DIODE, EU2A
D302	23316794	DIODE, SC570A
D303	23118822	DIODE, ERB12-02
D304	23118822	DIODE, ERB12-02
D305	23118041	DIODE, MA111
D311	23316682	DIODE, ZENER, MTZJ7.5C
D312	23316732	DIODE, ZENER, MTZJ18C
D313	23118859	DIODE, 1SS133
D314	23118859	DIODE, 1SS133
D315	23118859	DIODE, 1SS133
D401	23118094	DIODE, EU2A
D402	23118094	DIODE, EU2A
D403	23316731	DIODE, ZENER, MTZJ18B
D404	23316254	DIODE, ERC06-15
D405	23118094	DIODE, EU2A
D406	23118094	DIODE, EU2A
D407	23316731	DIODE, ZENER, MTZJ18B
D408	23115910	DIODE, S5295G
D409	23118094	DIODE, EU2A
D411	23118094	DIODE, EU2A
D413	23118707	DIODE, RP-1H
D414	23118707	DIODE, RP-1H
D415	23118859	DIODE, 1SS133
D416	23118094	DIODE, EU2A
D416	23118041	DIODE, MA111
D417	23316591	DIODE, ZENER, MA8100-M
D418	23316591	DIODE, ZENER, MA8100-M
D419	23316571	DIODE, ZENER CHIP VZ5.48-5.76V MA8056-M
D420	23118041	DIODE, MA111
D461	23224366	DIODE, FMQ-3GU
D461B	70391355	SCREW, 3X8MM
⚠ D482	23115774	DIODE, ZENER, RD6.2E(FA-1)
D520	23316647	DIODE, ZENER, MTZJ2.0B
D521	23118041	DIODE, MA111
D522	23118041	DIODE, MA111
D523	23118041	DIODE, MA111
D530	23316586	DIODE, ZENER, MA8082-H

Location No.	Parts No.	Description
D531	23316584	DIODE, ZENER CHIP VZ7.77-8.17V MA8082-L
D532	23118822	DIODE, ERB12-02
D533	23316586	DIODE, ZENER, MA8082-H
D534	23316792	DIODE, SC215
D535	23316591	DIODE, ZENER, MA8100-M
D601	23118041	DIODE, MA111
D602	23118041	DIODE, MA111
D603	23118041	DIODE, MA111
D604	23118041	DIODE, MA111
D607	23316616	DIODE, ZENER CHIP 21.45-22.55V MA8220-M
D608	23316616	DIODE, ZENER CHIP 21.45-22.55V MA8220-M
D611	23118041	DIODE, MA111
D612	23118041	DIODE, MA111
D613	23118041	DIODE, MA111
D614	23118041	DIODE, MA111
D615	23118041	DIODE, MA111
D616	23118041	DIODE, MA111
D661	23316580	DIODE, ZENER CHIP VZ7.29-7.67V MA8075-M
D704	23118859	DIODE, 1SS133
D705	23118859	DIODE, 1SS133
D715	23118859	DIODE, 1SS133
D721	23118859	DIODE, 1SS133
D761	23118859	DIODE, 1SS133
D762	23118859	DIODE, 1SS133
D763	23118859	DIODE, 1SS133
D764	23118859	DIODE, 1SS133
D781	23118859	DIODE, 1SS133
D782	23118859	DIODE, 1SS133
D783	23118859	DIODE, 1SS133
D784	23118859	DIODE, 1SS133
D801	23316784	DIODE, RBV1506, LF-A
D820	23118041	DIODE, MA111
D821	23118094	DIODE, EU2A
D840	23357207	DIODE, LN1WBA60
D841	23118528	DIODE, ZENER, RD5.6ESA B3
D842	23118536	DIODE, ZENER, RD4.7ES B1
D843	23118094	DIODE, EU2A
D845	23118859	DIODE, 1SS133
D846	23118633	DIODE, ZENER, RD3.0ES B2
D847	23118633	DIODE, ZENER, RD3.0ES B2
D848	23118859	DIODE, 1SS133
D851	23357215	DIODE, D4SBS6
D852	23316714	DIODE, RL2Z
D853	23316714	DIODE, RL2Z
D854	23316399	DIODE, EL1Z
D855	23316399	DIODE, EL1Z
D862	23118094	DIODE, EU2A
D864	23118094	DIODE, EU2A
D873	23118622	DIODE, ZENER, RD10ES B2
D875	23118623	DIODE, ZENER, RD10ES B1
D876	23118603	DIODE, ZENER VZ33.40-35.13 DO-34RD36ESA B3
D879	23118615	DIODE, ZENER, RD27ES B3
D881	23118859	DIODE, 1SS133
D882	23357012	DIODE, 1SS244
D883	23118859	DIODE, 1SS133
D884	23357217	DIODE, D4SBL40
D885	23357216	DIODE, D4SBL20U
D890	23316661	DIODE, ZENER, MTZJ3.9B
D891	23357214	DIODE, D4SBS4
D892	23316768	DIODE, FMB-26L
D899	24019485	VARISTOR, TNR10V431K
D901	23118859	DIODE, 1SS133
D904	23118859	DIODE, 1SS133
D905	23118859	DIODE, 1SS133

Location No.	Parts No.	Description
D906	23357012	DIODE, 1SS244
D907	23357012	DIODE, 1SS244
D908	23357012	DIODE, 1SS244
D909	23357012	DIODE, 1SS244
D912	23118859	DIODE, 1SS133
D913	23115337	DIODE, 1S1834
D914	23118859	DIODE, 1SS133
D915	23118859	DIODE, 1SS133
D916	23357012	DIODE, 1SS244
D917	23357012	DIODE, 1SS244
D918	23357012	DIODE, 1SS244
D919	23357012	DIODE, 1SS244
D921	23118859	DIODE, 1SS133
D924	23118859	DIODE, 1SS133
D925	23118859	DIODE, 1SS133
D926	23357012	DIODE, 1SS244
D927	23357012	DIODE, 1SS244
D928	23357012	DIODE, 1SS244
D929	23357012	DIODE, 1SS244
D936	23115337	DIODE, 1S1834
D967	23115337	DIODE, 1S1834
D7705	23118041	DIODE, MA111
D7706	23118041	DIODE, MA111
D7707	23118041	DIODE, MA111
D7708	23118041	DIODE, MA111
D7709	23118538	DIODE, ZENER, RD6.2ESA B2
D7715	23118041	DIODE, MA111
D7716	23118041	DIODE, MA111
D7717	23118538	DIODE, ZENER, RD6.2ESA B2
D7718	23118538	DIODE, ZENER, RD6.2ESA B2
D7719	23118538	DIODE, ZENER, RD6.2ESA B2
D7733	23118275	DIODE, ZENER, RD18MB2
D7734	23118275	DIODE, ZENER, RD18MB2
D7736	23118538	DIODE, ZENER, RD6.2ESA B2
D7738	23118041	DIODE, MA111
D7739	23118041	DIODE, MA111
D7740	23118041	DIODE, MA111
D7741	23118041	DIODE, MA111
D7742	23118041	DIODE, MA111
D7743	23118041	DIODE, MA111
D7745	23118041	DIODE, MA111
D7746	23118041	DIODE, MA111
D7747	23118041	DIODE, MA111
D7748	23118041	DIODE, MA111
D7749	23118041	DIODE, MA111
D7760	23118041	DIODE, MA111
D7806	23118041	DIODE, MA111
D7807	23316402	DIODE, RL4Z
D7808	23316766	DIODE, RU2YX
DA02	23316574	DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M
DA23	23118041	DIODE, MA111
DA43	23118041	DIODE, MA111
DA44	23118041	DIODE, MA111
DA45	23118041	DIODE, MA111
DA46	23118041	DIODE, MA111
DA70	23118041	DIODE, MA111
DB01	23358564	DIODE, LED, SLR-56VC3FPQ
DB03	23358522	DIODE, LED, SIR-56SB3F
DB30	23118041	DIODE, MA111
DB31	23118041	DIODE, MA111
DB51	23358573	PHOTO DIODE, PIN 940NM
DB52	23118859	DIODE, 1SS133
DB53	23118859	DIODE, 1SS133
DB54	23118859	DIODE, 1SS133
DB61	23118041	DIODE, MA111

Location No.	Parts No.	Description
DC01	23118041	DIODE, MA111
DC02	23118041	DIODE, MA111
DC03	23118041	DIODE, MA111
DC04	23118041	DIODE, MA111
DD81	23118859	DIODE, 1SS133
DD82	23118859	DIODE, 1SS133
DD83	23118859	DIODE, 1SS133
DH001	23316675	DIODE, ZENER, MTZJ6.2B
DH002	23316675	DIODE, ZENER, MTZJ6.2B
DH003	23316675	DIODE, ZENER, MTZJ6.2B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH302	23316672	DIODE, ZENER, MTZJ5.6B
DH303	23316672	DIODE, ZENER, MTZJ5.6B
DH304	23316672	DIODE, ZENER, MTZJ5.6B
DH305	23316672	DIODE, ZENER, MTZJ5.6B
DH306	23316672	DIODE, ZENER, MTZJ5.6B
DH307	23316672	DIODE, ZENER, MTZJ5.6B
DH308	23316672	DIODE, ZENER, MTZJ5.6B
DH309	23118859	DIODE, 1SS133
DH310	23118859	DIODE, 1SS133
DH311	23118859	DIODE, 1SS133
DH312	23118859	DIODE, 1SS133
DH313	23316666	DIODE, ZENER, MTZJ4.7B
DH314	23316666	DIODE, ZENER, MTZJ4.7B
DH315	23316666	DIODE, ZENER, MTZJ4.7B
DH316	23316666	DIODE, ZENER, MTZJ4.7B
DH401	23316574	DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M
DR10	23118041	DIODE, MA111
DR11	23118041	DIODE, MA111
DR12	23118041	DIODE, MA111
DR13	23118041	DIODE, MA111
DR14	23118041	DIODE, MA111
DR15	23118041	DIODE, MA111
DS90	23316596	DIODE, ZENER 11.40-11.96V
DS120	23316740	DIODE, ZENER VZ21.52-22.63 DO34 MTZ J 22D
DV01	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV02	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV03	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV07	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV08	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV09	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV11	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV12	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV13	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV17	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV18	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV25	23118041	DIODE, MA111
DV30	23316792	DIODE, SC215
DV31	23316672	DIODE, ZENER, MTZJ5.6B
DV39	23358543	PHOTO SENSOR, IF=10MA 650NM, S7565
DV161	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV161	23316591	DIODE, ZENER, MA8100-M
DV162	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV162	23316591	DIODE, ZENER, MA8100-M
DV163	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV163	23316591	DIODE, ZENER, MA8100-M
DV164	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV164	23316591	DIODE, ZENER, MA8100-M
DV165	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV165	23316591	DIODE, ZENER, MA8100-M

Location No.	Parts No.	Description
DV166	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV166	23316591	DIODE, ZENER, MA8100-M
MISCELLANEOUS		
B110	23929684	BACK TERM BOARD 65HDX82
B224	23035412	SCREW, BTB4X12SZN
B230	23037312	SCREW, BTBW3X12SZN
B233	23035412	SCREW, BTB4X12SZN
B234	23035412	SCREW, BTB4X12SZN
B235	23035310	SCREW, BTB3X10SZN
B236	23035412	SCREW, BTB4X12SZN
BB10	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB11	23713013	BASE SOCKET 16P 1.5
BB20	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB21	23713013	BASE SOCKET 16P 1.5
BB30	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB31	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB300	23368627	CONNECTOR, BRIDGE B-B 8P 2.5JST 08TM-2.5FJ-E
E918	23737007	BOLT, BOLT ASSY 50A60
E948	23737007	BOLT, BOLT ASSY 50A60
E978	23737007	BOLT, BOLT ASSY 50A60
F470	23144624	FUSE, AXIAL, 125V 2.0A
F801	23144481	FUSE, 125V 7.0A-T U/C MINI
F801A	23165433	FUSE HOLDER, 5.2 SOC
F840	23144581	FUSE, AXIAL, 125V 200MA
F850	23144627	FUSE, AXIAL, 125V 5.0A
F851	23144627	FUSE, AXIAL, 125V 5.0A
F852	23144624	FUSE, AXIAL, 125V 2.0A
F853	23144622	FUSE, AXIAL, 125V 1.25A
F860	23144456	FUSE, AXIAL, 125V 5.0A
F889	23144626	FUSE, AXIAL, 125V 4.0A
F890	23144625	FUSE, AXIAL, 125V 3.15A
F891	23144627	FUSE, AXIAL, 125V 5.0A
G101	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
G102	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
GCD86	24797100	ELECTROLYTIC, 50V 10UF M
GCD88	24797100	ELECTROLYTIC, 50V 10UF M
GCD90	24797100	ELECTROLYTIC, 50V 10UF M
GCD91	24797100	ELECTROLYTIC, 50V 10UF M
GJ01	24000445	CHIP JUMPER, 1608TYPE
GJ01	24000445	CHIP JUMPER, 1608TYPE
GJ02	24000445	CHIP JUMPER, 1608TYPE
GJ03	24000445	CHIP JUMPER, 1608TYPE
GJ05	24000445	CHIP JUMPER, 1608TYPE
GJ05	24000445	CHIP JUMPER, 1608TYPE
GJ06	24000445	CHIP JUMPER, 1608TYPE
GJ07	24000824	CHIP JUMPER, 2125TYPE
GJ11	24000445	CHIP JUMPER, 1608TYPE
GJ13	24000445	CHIP JUMPER, 1608TYPE
GJ14	24000445	CHIP JUMPER, 1608TYPE
GJ14	24000445	CHIP JUMPER, 1608TYPE
GJ14	24000445	CHIP JUMPER, 1608TYPE
GJ15	24000445	CHIP JUMPER, 1608TYPE
GJ15	24000445	CHIP JUMPER, 1608TYPE
GJ15	24000445	CHIP JUMPER, 1608TYPE
GJ16	24000445	CHIP JUMPER, 1608TYPE
GJ16	24000445	CHIP JUMPER, 1608TYPE
GJ17	24000445	CHIP JUMPER, 1608TYPE
GJ18	24000445	CHIP JUMPER, 1608TYPE
GJ19	24000445	CHIP JUMPER, 1608TYPE
GJ20	24000445	CHIP JUMPER, 1608TYPE
GJ20	24000445	CHIP JUMPER, 1608TYPE
GJ21	24000445	CHIP JUMPER, 1608TYPE
GJ30	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
GJ33	24000445	CHIP JUMPER, 1608TYPE
GJ40	24000445	CHIP JUMPER, 1608TYPE
GJ41	24000445	CHIP JUMPER, 1608TYPE
GJ61	24000445	CHIP JUMPER, 1608TYPE
GJ62	24000445	CHIP JUMPER, 1608TYPE
GJ63	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ64	24000445	CHIP JUMPER, 1608TYPE
GJ65	24000445	CHIP JUMPER, 1608TYPE
GJ66	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ67	24000445	CHIP JUMPER, 1608TYPE
GJ68	24000445	CHIP JUMPER, 1608TYPE
GJ69	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ71	24000445	CHIP JUMPER, 1608TYPE
GJ72	24000445	CHIP JUMPER, 1608TYPE
GJ73	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ74	24000445	CHIP JUMPER, 1608TYPE
GJ75	24000445	CHIP JUMPER, 1608TYPE
GJ76	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ77	24000445	CHIP JUMPER, 1608TYPE
GJ77	24000445	CHIP JUMPER, 1608TYPE
GJ78	24000445	CHIP JUMPER, 1608TYPE
GJ79	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ80	24000445	CHIP JUMPER, 1608TYPE
GJ81	24000824	CHIP JUMPER, 2125TYPE
GJ82	24000824	CHIP JUMPER, 2125TYPE
GJ83	24000824	CHIP JUMPER, 2125TYPE
GJ91	24000445	CHIP JUMPER, 1608TYPE
GJ92	24000445	CHIP JUMPER, 1608TYPE
GJ93	24000445	CHIP JUMPER, 1608TYPE
GJ97	24000445	CHIP JUMPER, 1608TYPE
GJ98	24000445	CHIP JUMPER, 1608TYPE
GJ201	24000445	CHIP JUMPER, 1608TYPE
GJ202	24000445	CHIP JUMPER, 1608TYPE
GJ203	24000445	CHIP JUMPER, 1608TYPE
GJ204	24011220	CHIP, METAL FILM, 1/20W 22 OHM J
GJ205	24000445	CHIP JUMPER, 1608TYPE
GJ207	24000445	CHIP JUMPER, 1608TYPE
GJ208	24000445	CHIP JUMPER, 1608TYPE
GJ208	24000445	CHIP JUMPER, 1608TYPE
GJ209	24000445	CHIP JUMPER, 1608TYPE
GJ210	24000445	CHIP JUMPER, 1608TYPE
GJ210	24000445	CHIP JUMPER, 1608TYPE
GJ211	24000445	CHIP JUMPER, 1608TYPE
GJ212	24000445	CHIP JUMPER, 1608TYPE
GJ216	24000445	CHIP JUMPER, 1608TYPE
GJ223	24000445	CHIP JUMPER, 1608TYPE
GJ224	24000445	CHIP JUMPER, 1608TYPE
GJ225	24000445	CHIP JUMPER, 1608TYPE
GJ226	24000445	CHIP JUMPER, 1608TYPE
GJ227	24000445	CHIP JUMPER, 1608TYPE
GJ228	24000445	CHIP JUMPER, 1608TYPE
GJ229	24000445	CHIP JUMPER, 1608TYPE
GJ664	24000445	CHIP JUMPER, 1608TYPE
GJ665	24000445	CHIP JUMPER, 1608TYPE
GJA33	24000445	CHIP JUMPER, 1608TYPE
GR99	24000445	CHIP JUMPER, 1608TYPE
GRD80	24366472	CARBON FILM, 1/6W 4.7K OHM J
GRD82	24366472	CARBON FILM, 1/6W 4.7K OHM J
H003	23124087	ANTENNA SWITCH, BUNPAI, RSU135X1
H003A	23740989	NUT, F-CONNECTOR 2H BS
JX601	24000445	CHIP JUMPER, 1608TYPE
JX602	24000445	CHIP JUMPER, 1608TYPE
K913	23306465	REMOCON HAND UNIT IR, IR
KB01	23000852	IC, REMOCON RECEIVER, PIC-37043TE2

Location No.	Parts No.	Description
P350	23368634	CONNECTOR, PLUG, B-B 1.5MM 25P, JDV-PS25LB-10-1
P410	23903025	CONNECTOR, SOCKET, B-B 1.5MM 25P JDV-R25LB-10-1
P540	23903040	SOCKET, B-B 2MM 56P TAIKO
P708	23902655	CONNECTOR, 15P
P709	23902655	CONNECTOR, 15P
P713	23164787	CONNECTOR, PLUG, 7P
P714	23164787	CONNECTOR, PLUG, 7P
P715	23164787	CONNECTOR, PLUG, 7P
P801	23372191	POWER CORD, U/C FL 125V7A
P802	23368013	CONNECTOR, PLUG, 2P 11.88MM W VT-JST
P900	23164563	CONNECTOR, PLUG 3P
P900	23164563	CONNECTOR, PLUG 3P
P900	23164563	CONNECTOR, PLUG 3P
P900	23164563	CONNECTOR, PLUG 3P
PB13A	23367677	PLUG, 4P L TYPE 2.5MM
PH001	23367724	CONNECTOR, PLUG, B-B 15P
PH002	23367724	CONNECTOR, PLUG, B-B 15P
PR80	23023028	JACK, EARPHONE YKB21-5206
PR83	23023028	JACK, EARPHONE YKB21-5206
PV02	23365819	JACK, 1S3P
PV04	23023027	PIN(1G+1B+2L:F+2R:F+1R)
PV05	23368646	PLUG, B-B 2MM 56P TAIKO
PV06	23903040	SOCKET, B-B 2MM 56P TAIKO
S602	23145412	SWITCH, SLIDE SWITCH
SA01	23145226	SWITCH, 1C1P, PUSH
SA02	23145226	SWITCH, 1C1P, PUSH
SA03	23145226	SWITCH, 1C1P, PUSH
SA04	23145226	SWITCH, 1C1P, PUSH
SA05	23145226	SWITCH, 1C1P, PUSH
SA06	23145226	SWITCH, 1C1P, PUSH
SA07	23145226	SWITCH, 1C1P, PUSH
SA08	23145226	SWITCH, 1C1P, PUSH
SA09	23145226	SWITCH, 1C1P, PUSH
SR81	23146577	RELAY, DLS5D1-O(M)0.25W
UZ01	23148024	SCAN CONVERTER MODUL, N.H, MVPU14
⚠ V901A	23903168	SOCKET, CVT3277-5104G SMK
⚠ V902A	23903168	SOCKET, CVT3277-5104G SMK
⚠ V903A	23903168	SOCKET, CVT3277-5104G SMK
W661	23151232	SPEAKER, SPK-1235, 160X160, 65HZ, 8 OHM
W662	23151232	SPEAKER, SPK-1235, 160X160, 65HZ, 8 OHM
W663	23351172	SPEAKER, TWC 50X50 16-OHM 15W, SPK-1417AM
W664	23351172	SPEAKER, TWC 50X50 16-OHM 15W, SPK-1417AM
X4401	23153721	CERAMIC RESONATOR, 503KHZ
X4402	23153721	CERAMIC RESONATOR, 503KHZ
XA01	23153533	CERAMIC RESONATOR, CERA RESO, TCR1082AM
XH401	23153752	CRYSTAL, 8.000 40PPM 50OHM
XV01	23153533	CERAMIC RESONATOR, CERA RESO, TCR1082AM
⚠ Z401	24083013	COMPOSITE PARTS, CR-BLOCK, TPA5010AH
Z405	23140203	SPARK GAP, 2.0-3.0KV C-010, AG20PC152F-L3N
Z410	23110841	FOCUS PACK, TPA6030
Z410	23110847	FOCUS PACK, TPA6030BY
Z450A	23501755	ANODE CABLE, 400LD FBT-C
⚠ Z801	23148734	MODULE, PROTECTOR, HIC1026A
ZH001	23103823	COIL, FILTER, TEM2027D
ZH002	23103823	COIL, FILTER, TEM2027D
ZH04	23103778	FILTER, FERRITE CORE, TFE1008
ZH05	23103840	FERRITE CORE, TFE1013
ZH121	23103823	COIL, FILTER, TEM2027D
ZH122	23103823	COIL, FILTER, TEM2027D
ZH141	23103823	COIL, FILTER, TEM2027D
ZH142	23103823	COIL, FILTER, TEM2027D
ZH161	23103823	COIL, FILTER, TEM2027D
ZH162	23103823	COIL, FILTER, TEM2027D
ZH408	23103823	COIL, FILTER, TEM2027D
ZH500	23103823	COIL, FILTER, TEM2027D
ZV12	23103840	FERRITE CORE, TFE1013
ZV13	23103840	FERRITE CORE, TFE1013
ZV14	23103840	FERRITE CORE, TFE1013
ZV15	23103840	FERRITE CORE, TFE1013
ZV16	23103840	FERRITE CORE, TFE1013
ZV17	23103840	FERRITE CORE, TFE1013
ZV18	23103840	FERRITE CORE, TFE1013
ZV19	23103840	FERRITE CORE, TFE1013
ZV20	23103840	FERRITE CORE, TFE1013
ZV60	23103778	FILTER, FERRITE CORE, TFE1008
ZV61	23103778	FILTER, FERRITE CORE, TFE1008
PC BOARD ASSEMBLIES		
✻ E021Z	23787467	A/V BOARD, PD0646A1
✻ E022Z	23787725	REM BOARD, PD0646A2
✻ E031Z	23787458	CRT-D/R BOARD, PD0641A1
✻ E032Z	23787459	CRT-D/G BOARD, PD0641A2
✻ E033Z	23787460	CRT-D/B BOARD, PD0641A3
✻ E034Z	23787461	SVM/R BOARD, PD0641A4
✻ E035Z	23787462	SVM/G BOARD, PD0641A5
✻ E036Z	23787463	SVM/B BOARD, PD0641A6
✻ E041Z	23787915	FRONT-CON BOARD, PD0221A-1
✻ E042Z	23787916	FRONT-IN BOARD, PD0221A-2
✻ E044Z	23787917	FRONT-SEN BOARD, PD0221A-4
✻ E051Z	23786222	CONV-SEN BOARD, PD0079-1
✻ E052Z	23786223	CONV-SEN2 BOARD, PD0079-2
✻ E053Z	23786224	CONV-SEN3 BOARD, PD0079-3
✻ E054Z	23786225	CONV-SEN4 BOARD, PD0079-4
✻ U401	23787717	DPC BOARD, PD0077D
✻ U801	23787710	DEF/POWER BOARD, PD0640B
✻ U901	23787720	SIG/CONV BOARD, PD0639B
✻ UD01	23787523	WOW BOARD, PD0645B
✻ UH01	23787714	DIGI-CONV BOARD, PD0638D
✻ UV02	23787468	DVI BOARD, PD0647A
PICTURE TUBE		
⚠ V901R	23086306	CRT CPLG R
⚠ V902G	23086307	CRT CPLG G
⚠ V903B	23086308	CRT CPLG B
TUNER		
H001	23321411	TUNER, TIM 181CH IIC PH SHINSEN, EL967LW
HY01	23321412	TUNER, TIF 181CH IIC PH TDL, EL963L
ACCESSORIES		
K912	23306458	REMOCON HAND UNIT IR, CTV, CT-90121
Y101	23565682	OWNER'S MANUAL, ENGLISH/FRENCH, 65HDX82
CABINET PARTS		
A001	23411712	WOOD CAB SHIP 65HDX82
A102	23527203	GRILLE, SPK GRILLE ASSY 65HX81
A139	23451976	PUSH CATCH, CLICK
A140A	23427972	DOOR, DOOR PROPER 50HX81
A143	23445516	BUTTON, POWER 50HX81
A160	23469228	CASTER, TP50H60
A175	23929314	PIECE, CLIP, TZ50V61
A201	23540678	COVER, BEZEL 65H81

Location No.	Parts No.	Description
A202	23450389	PANEL, CONTROL PANEL ASSY 50HX81
A268	23540681	COVER, FRONT COVER 50HX81
A421	23540170	COVER, REAR BOARD 50A60
A424	23530340	BACK BOARD 65HDX82
A510	23030815	WOOD SCREW PTD #6 X 3/4 TNP LOCAL
A519	23030815	WOOD SCREW PTD #6 X 3/4 TNP LOCAL
A521	23030815	WOOD SCREW PTD #6 X 3/4 TNP LOCAL
A543	72471068	SCREW, 4X12
A701	23064865	CARTON, CARTON 65HDX82
A703	23946215	PACKING, TOP PACKING 65H81
A708	23946380	BOTTOM PACKING 65H82
K111	23405024	LENS, DELTA265A/B
K112	23405024	LENS, DELTA265A/B
K113	23405024	LENS, DELTA265A/B
K501	23311953	SCREEN, 65DM LENTI SHEET, SCREEN65DM-L
K502	23311954	SCREEN, 65DM FRESNEL, SCREEN65DM-F
K503	23311900	SCREEN, PROTECTOR 65AL AR T0, SCR-PRO65AL
K601	23405029	MIRROR, 65WL 65H81, MIRRORWL
T461	23236742	TRANSFORMER FLYBACK TFB3092AD

Location No.	Parts No.	Description

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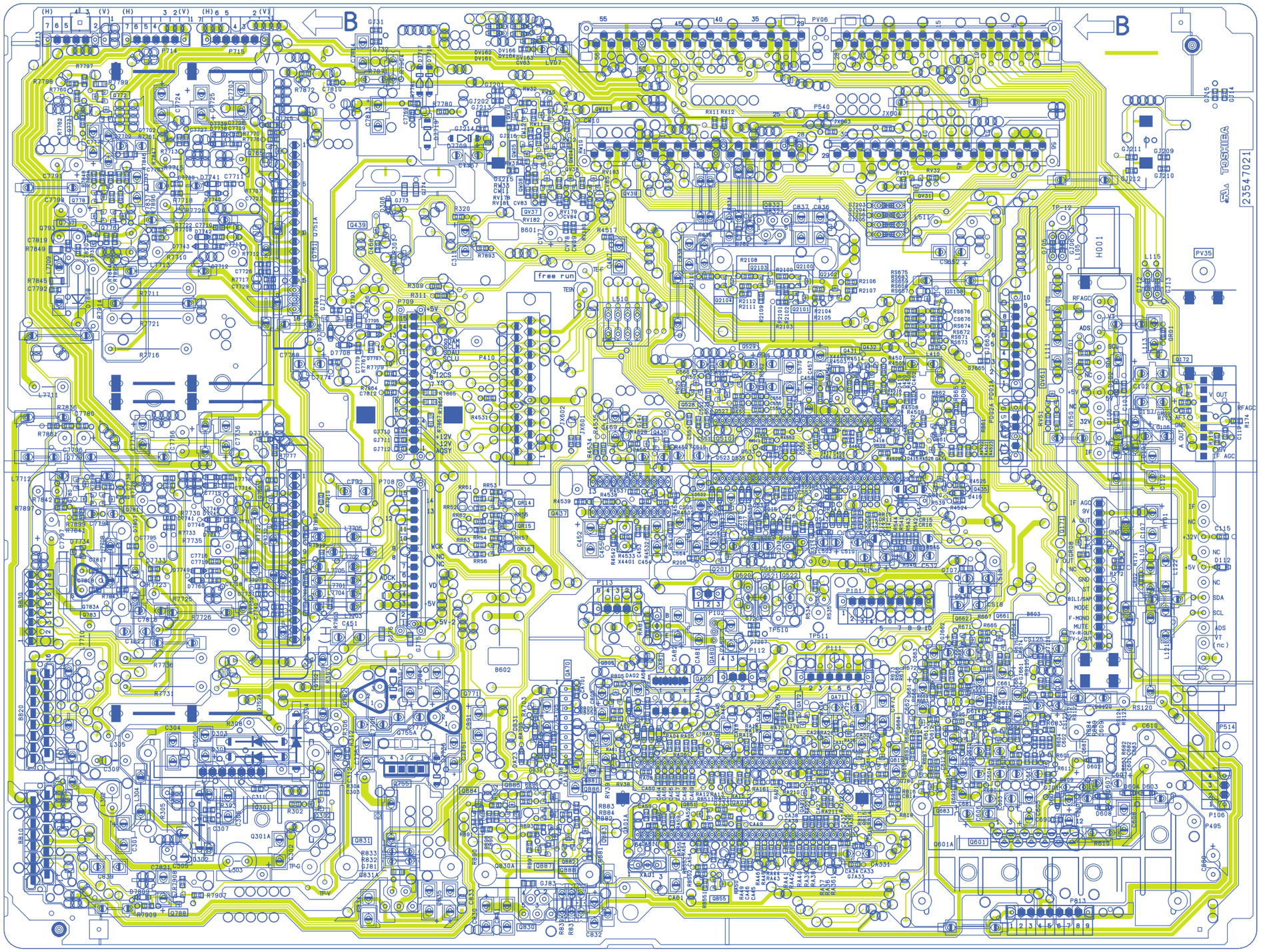
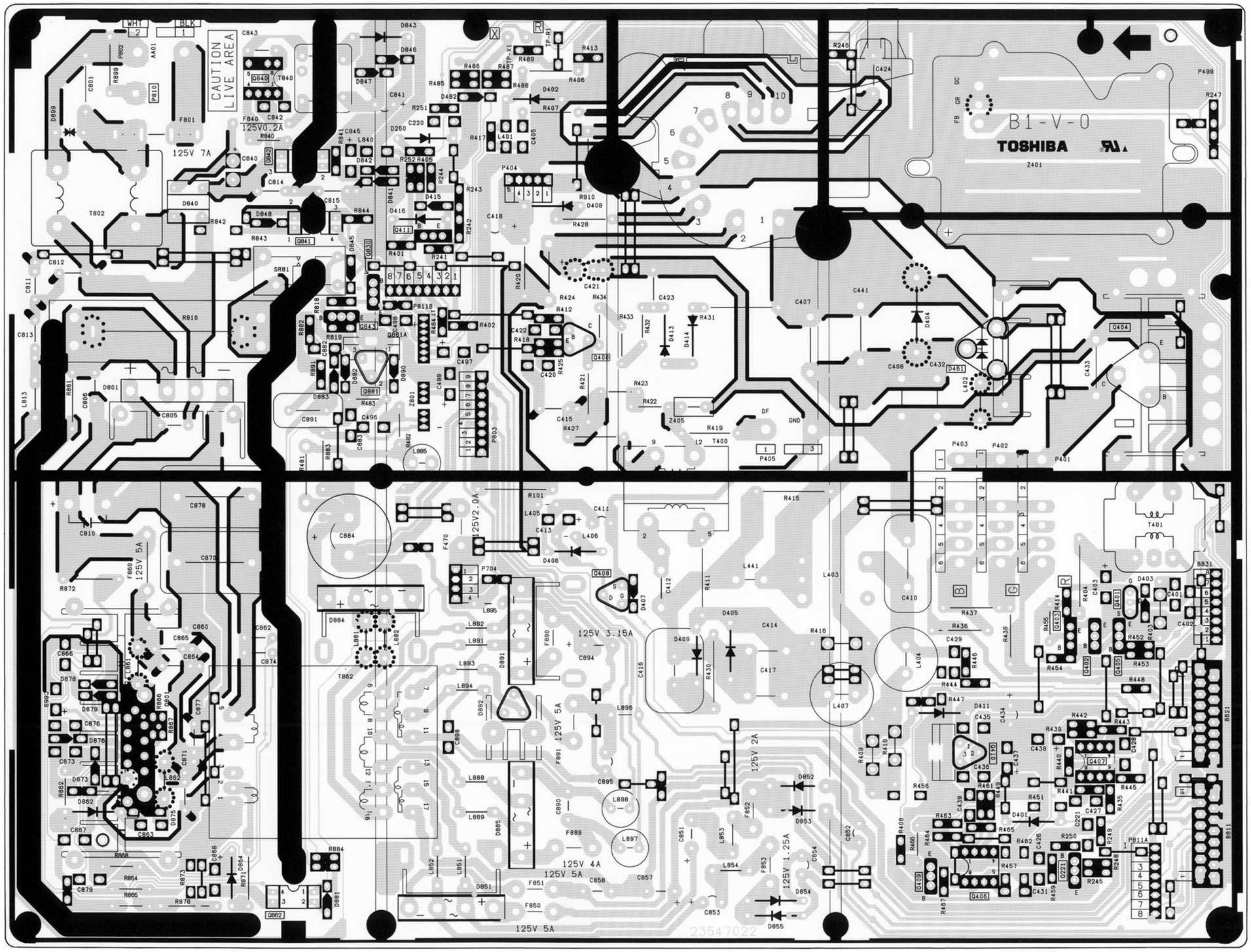
SIGNAL/CONV BOARD PD0639B

BOTTOM (FOIL) SIDE



DEF/POWER BOARD PD0640B

BOTTOM (FOIL) SIDE



AV BOARD PD0646A-1

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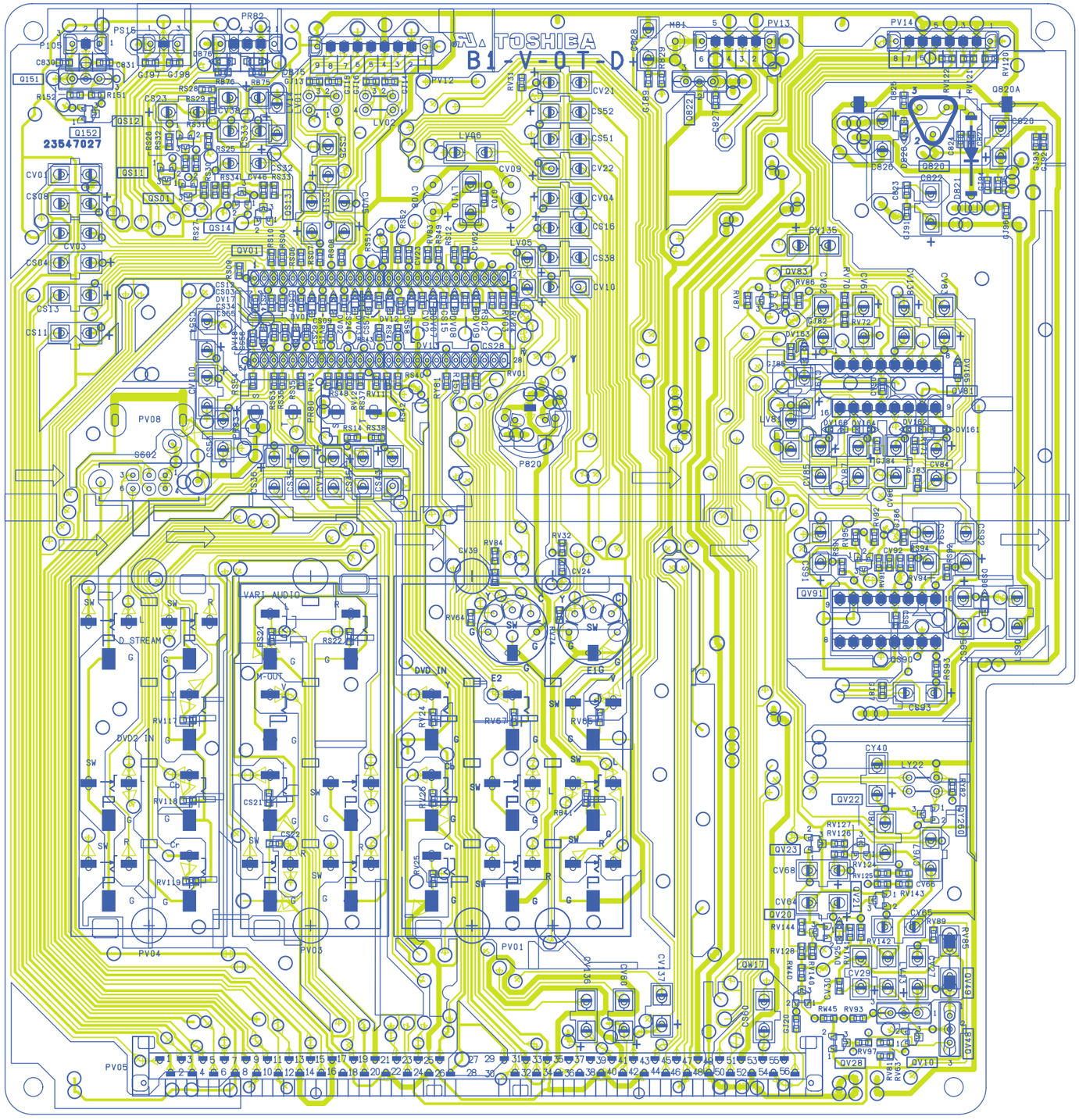
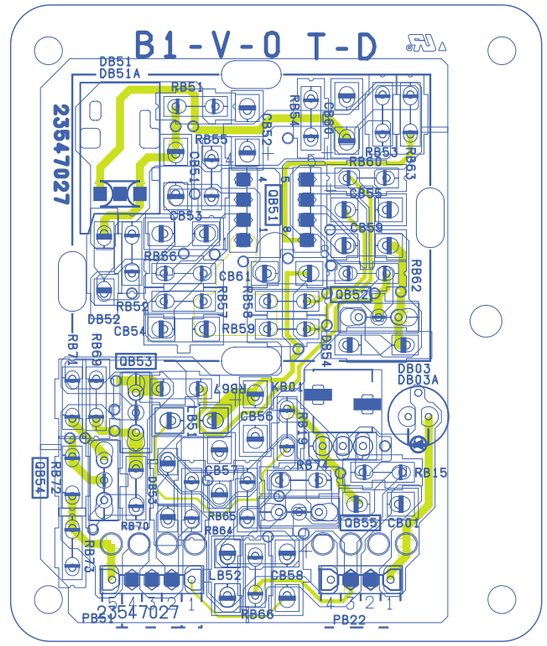


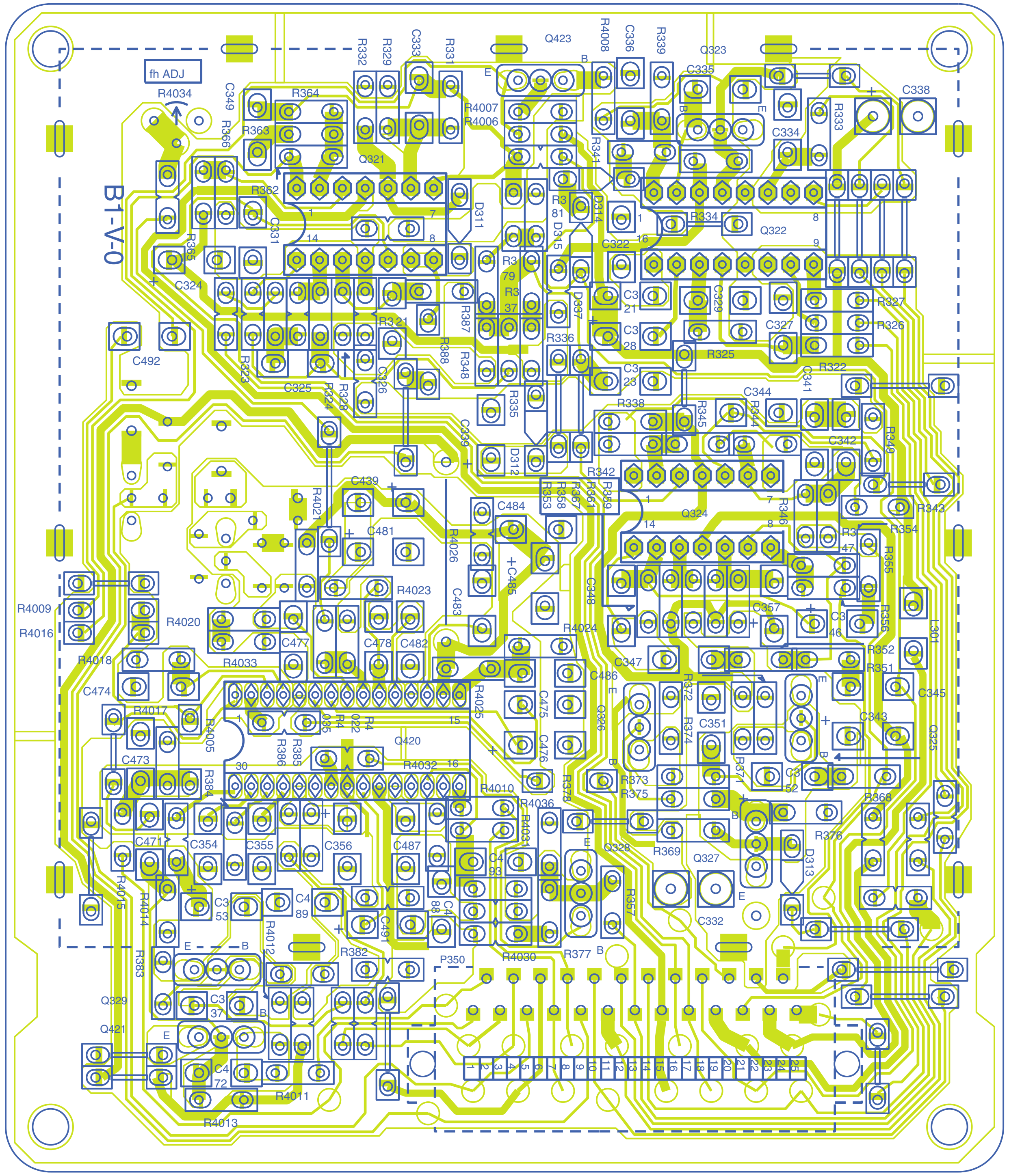
REM BOARD PD0646A-2

BOTTOM (FOIL) SIDE



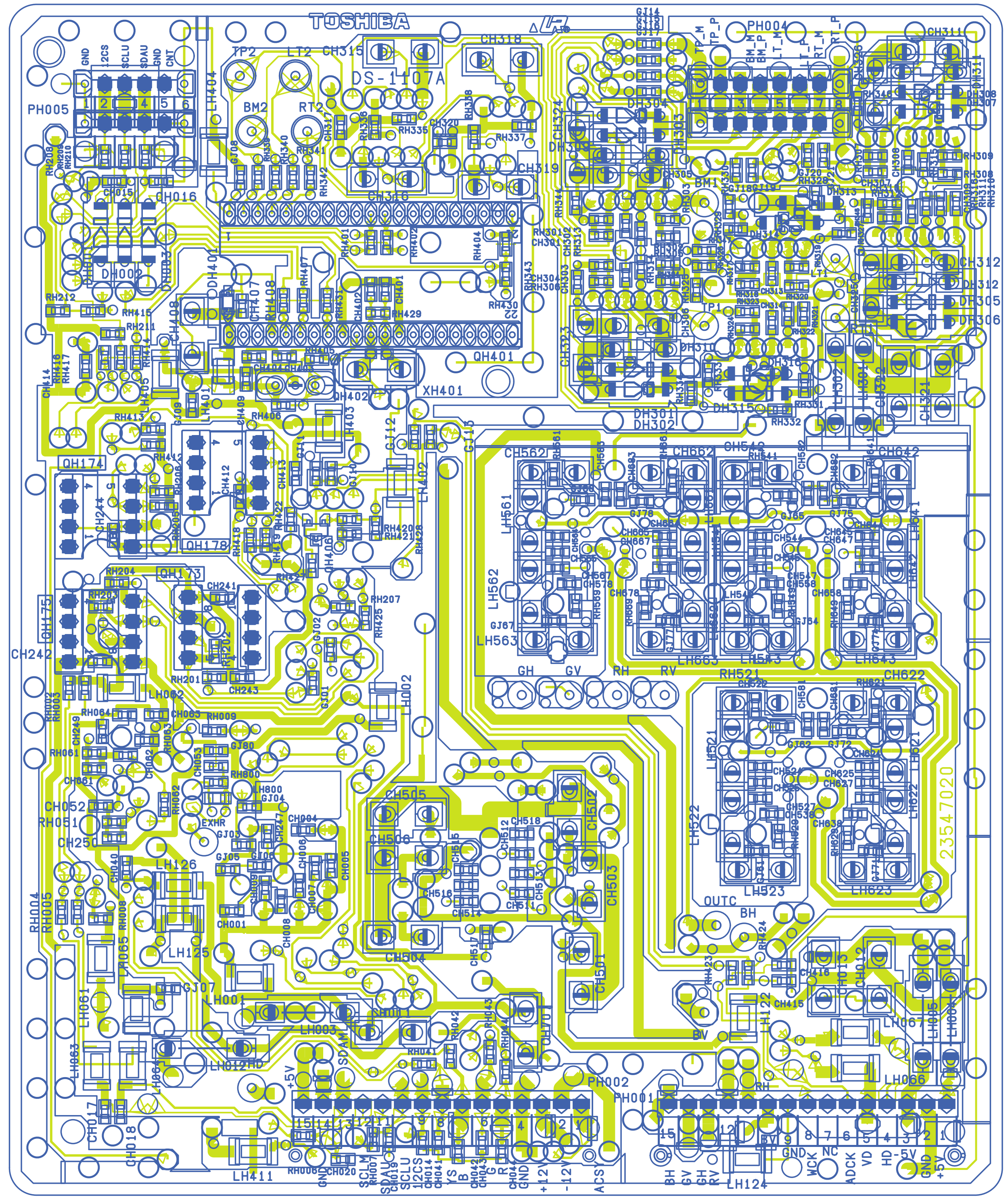
DPC BOARD PD0077D

BOTTOM (FOIL) SIDE



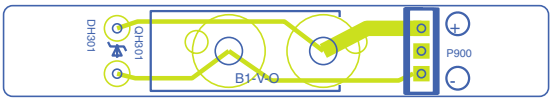
DIGI-CONV BOARD PD0638D

BOTTOM (FOIL) SIDE



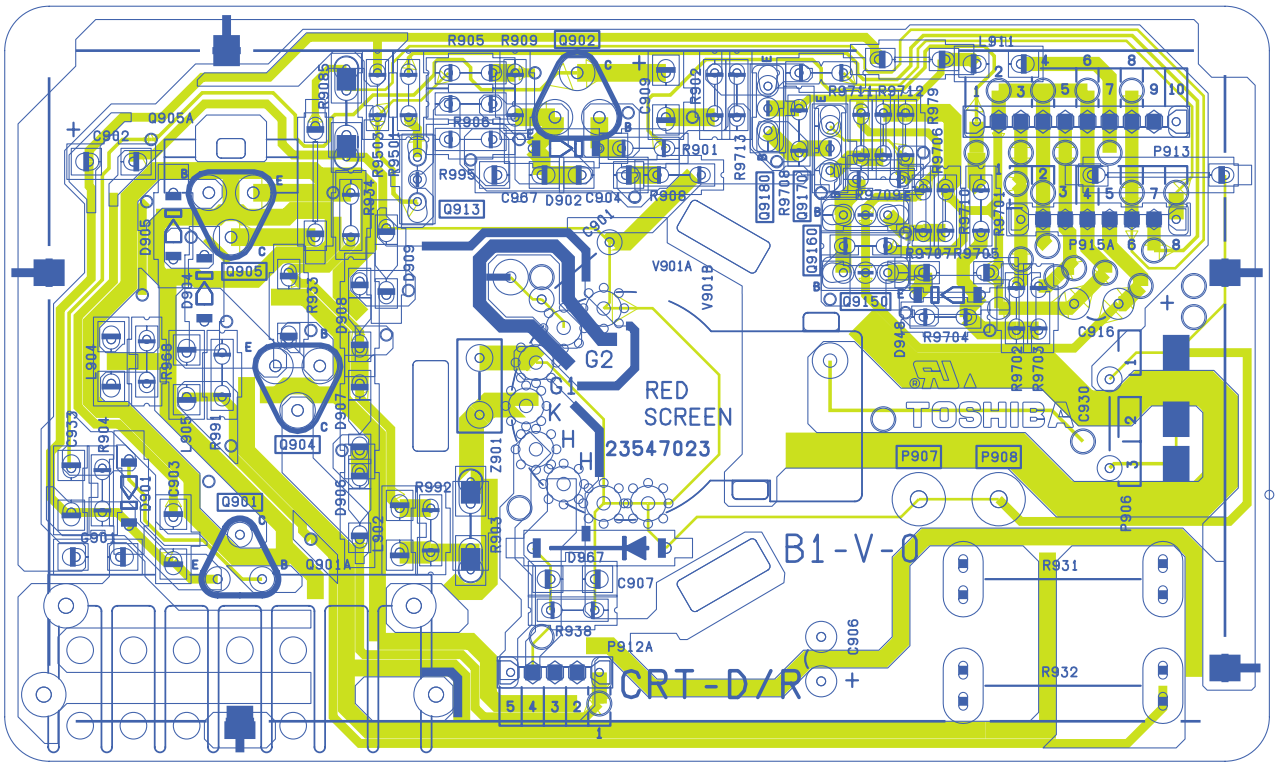
CONV-SEN BOARD PD0079

BOTTOM (FOIL) SIDE



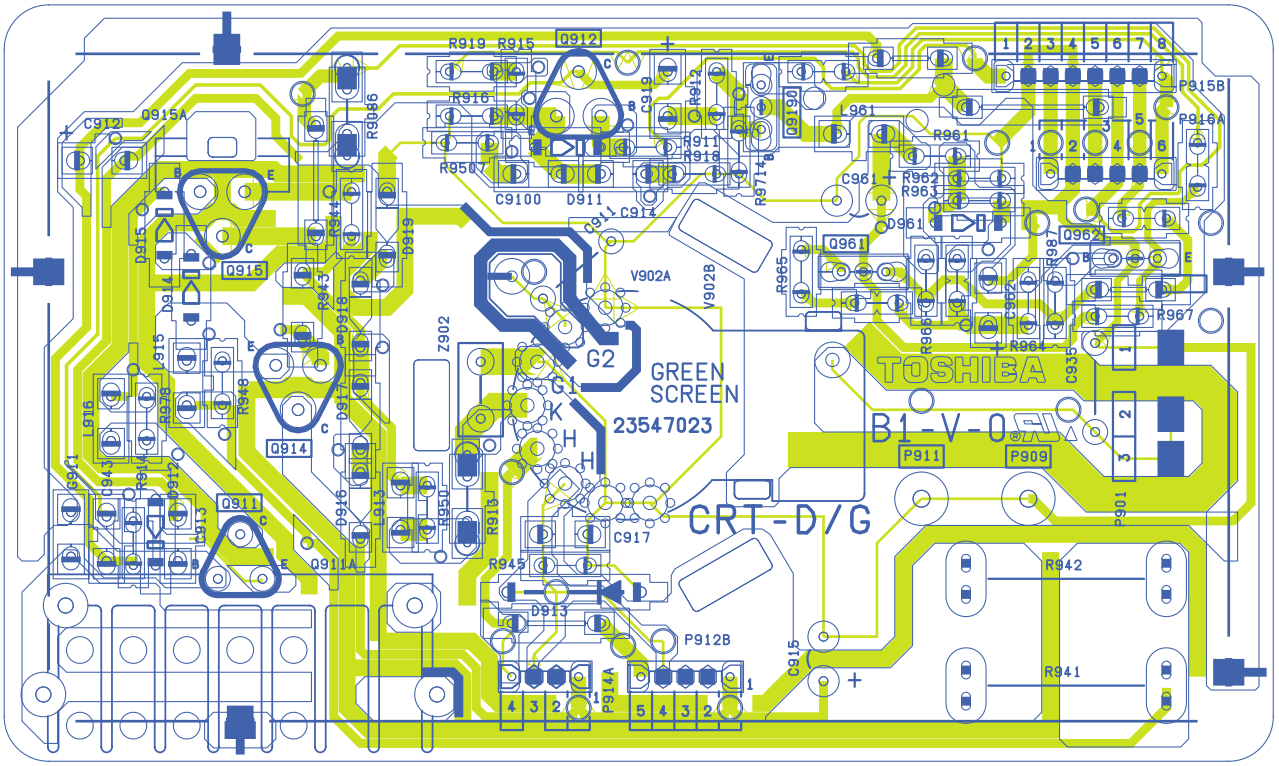
CRT DRIVE(RED) BOARD PD0641A-1

BOTTOM (FOIL) SIDE



CRT DRIVE(GRN) BOARD PD0641A-2

BOTTOM (FOIL) SIDE



CRT DRIVE(BLE) BOARD PD0641A-3

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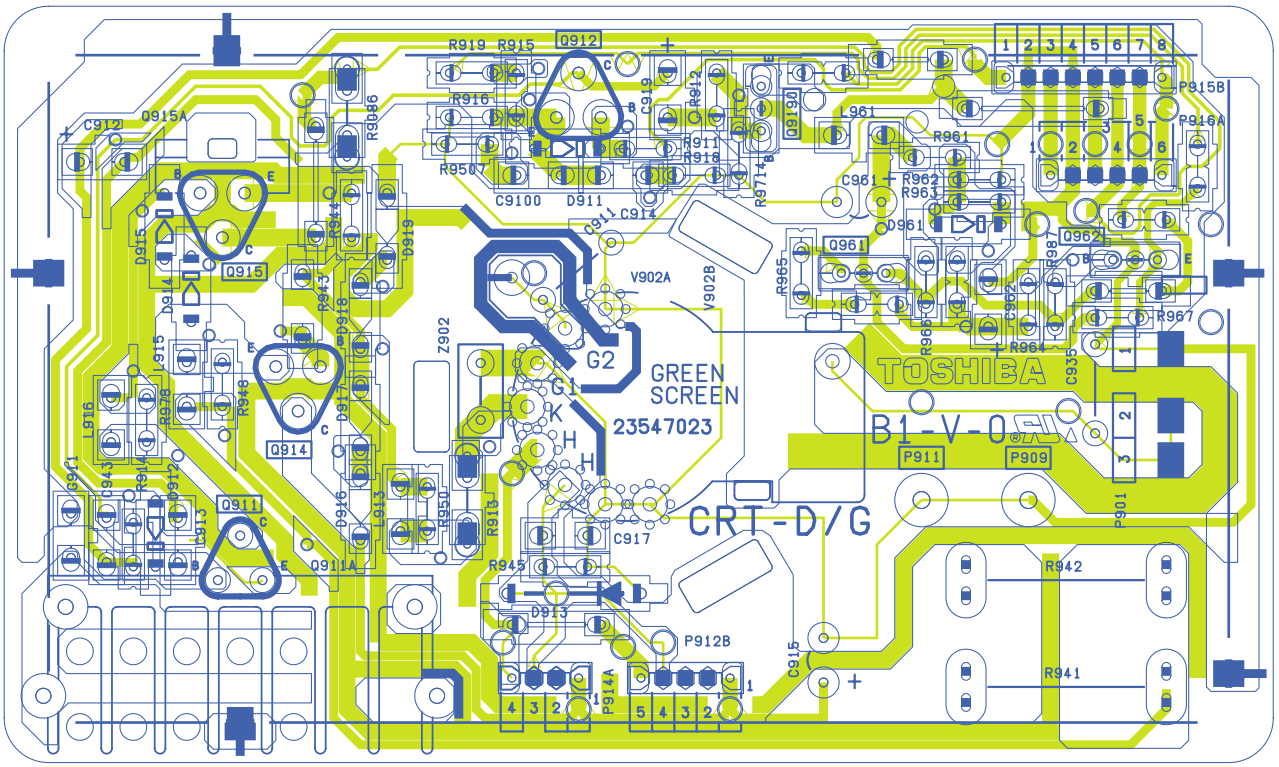
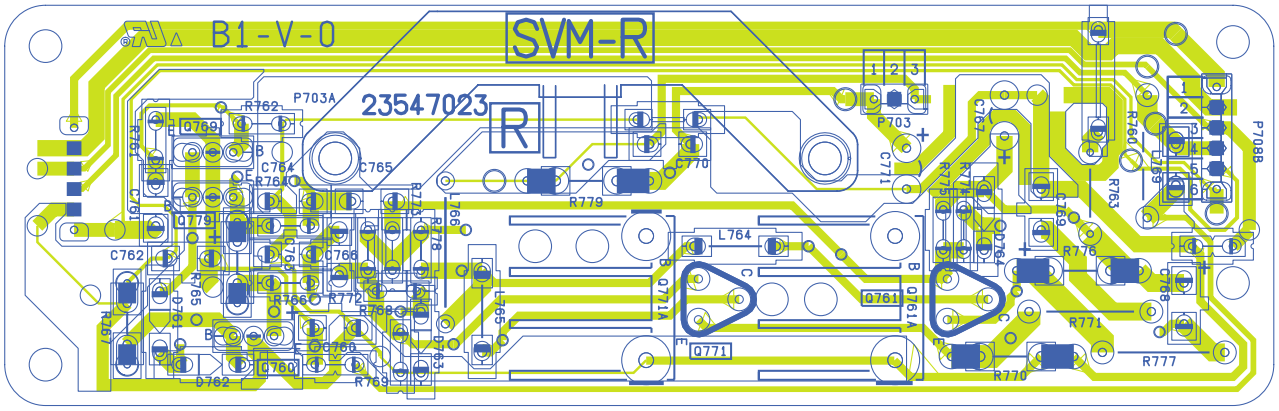


SVM-R BOARD PD0641A-4

BOTTOM (FOIL) SIDE



SVM-G BOARD PD0641A-5

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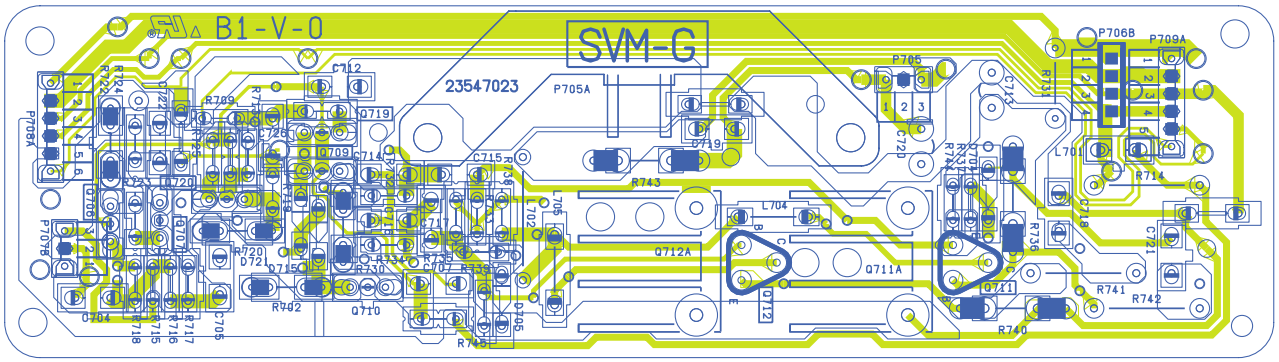
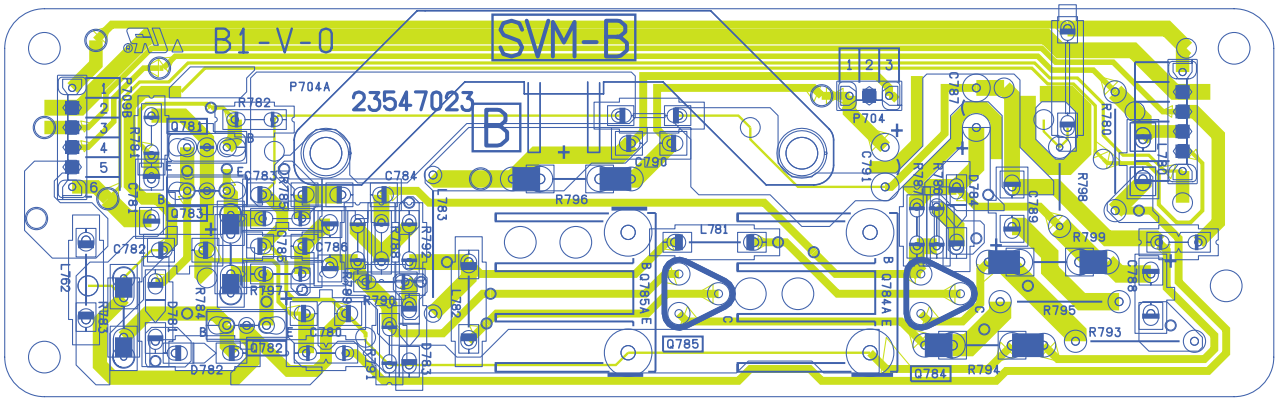


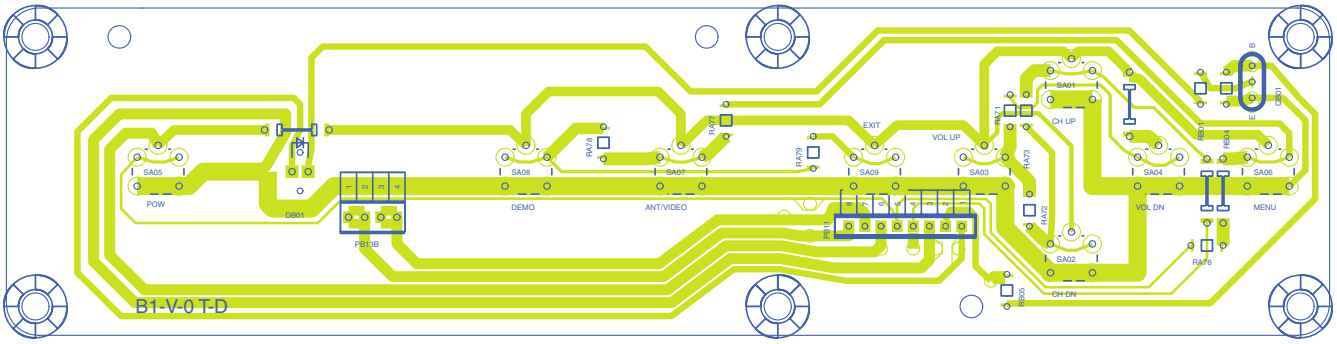
SVM-B BOARD PD0641A-6

BOTTOM (FOIL) SIDE



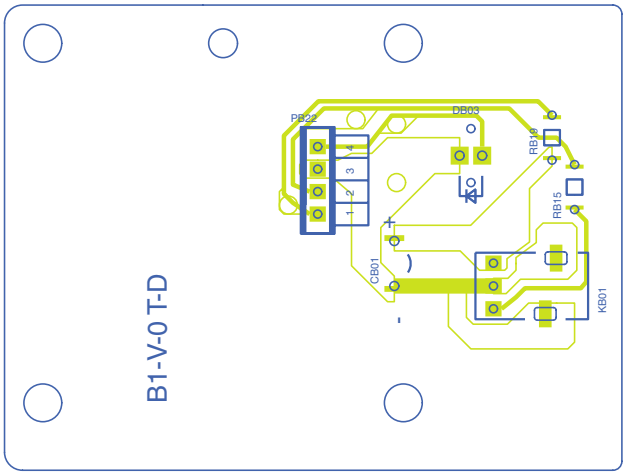
FRONT-CONTROL BOARD PD0221A-1

BOTTOM (FOIL) SIDE



FRONT-SEN BOARD PD0221A-4

BOTTOM (FOIL) SIDE



FRONT-ALS BOARD PD0221A-1

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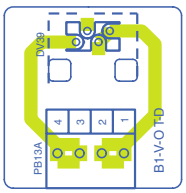
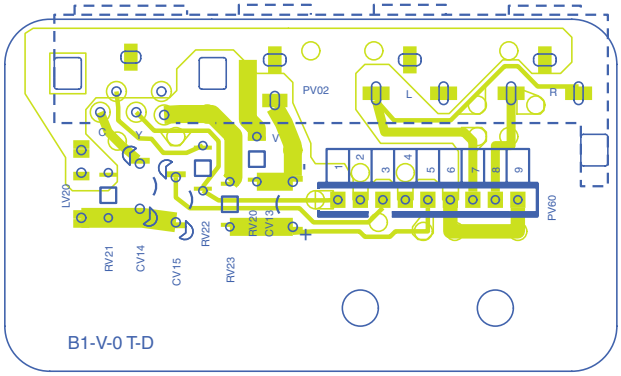


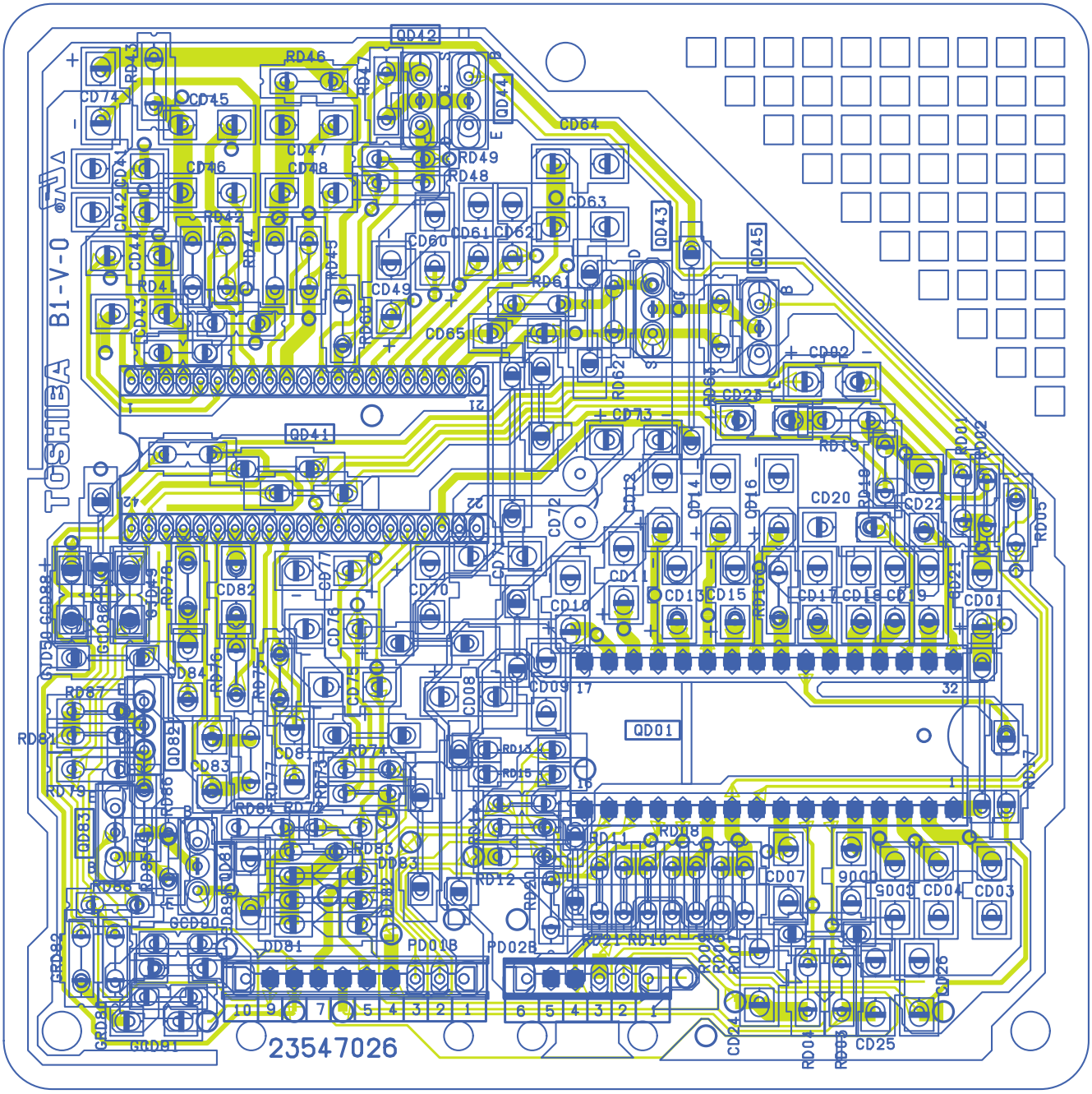
FRONT-IN BOARD PD0221A-2

BOTTOM (FOIL) SIDE



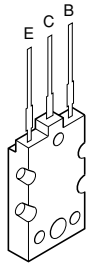
WOW BOARD PD0645B

BOTTOM (FOIL) SIDE

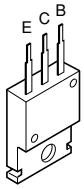


TERMINAL VIEW OF TRANSISTORS

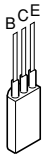
① 2SC5144
2SC5859



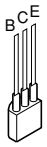
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



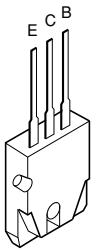
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



⑤ 2SA1788



⑥ RN2203
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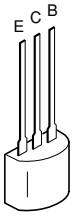
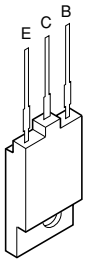
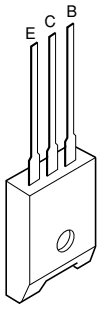
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SD2553
2SC5143



⑧ ON4409



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SCHEMATIC DIAGRAM

MODEL : 65HDX82

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

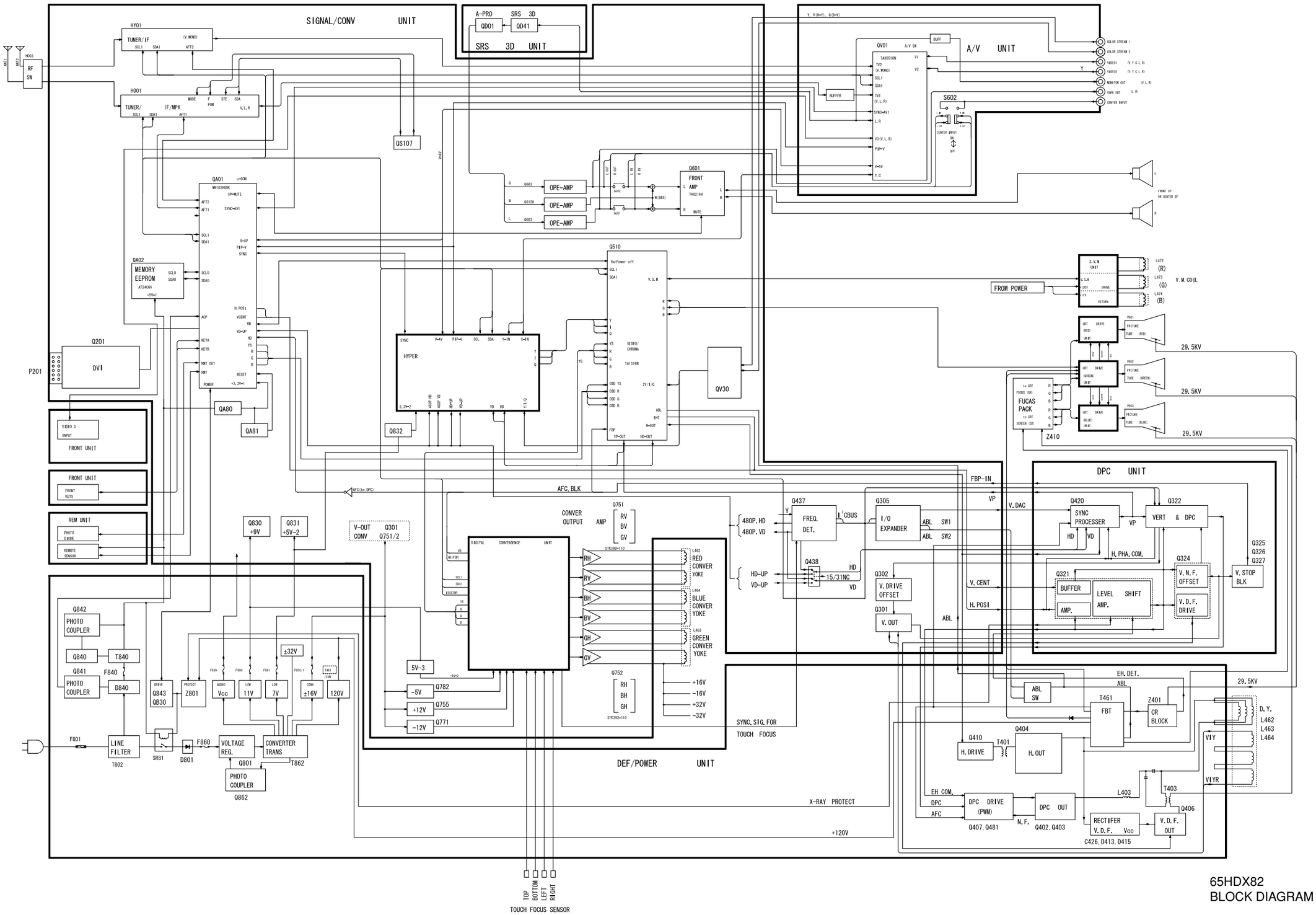
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   Electolytic capacitor Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 120 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ **SCHEMATIC DIAGRAM STRUCTURE:**

- SIGNAL / CONVER Circuit
  - (Conver) [SHEET - 1/7] 1/19
  - (Defrection) [SHEET - 2/7] 2/19
  - (If) [SHEET - 3/7] 3/19
  - (Maicon) [SHEET - 4/7] 4/19
  - (Power) [SHEET - 5/7] 5/19
  - (Audio) [SHEET - 6/7] 6/19
  - (Video) [SHEET - 7/7] 7/19
- POWER / DEF Circuit
  - (Power) [SHEET - 1/2] 8/19
  - (Defrection) [SHEET - 2/2] 9/19
- DPC Circuit 10/19
- DIGITAL CONVER Circuit
  - (1/2) [SHEET - 1/2] 11/19
  - (2/2) [SHEET - 2/2] 12/19
- AV / REM Circuit
  - (1/2) [SHEET - 1/2] 13/19
  - (2/2) [SHEET - 2/2] 14/19
- FRONT / T. FOCUS-SENSOR Circuit 15/19
- SRS-WOW Circuit 16/19
- CRT / SVM Circuit
  - (CRT) [SHEET - 1/2] 17/19
  - (SVM) [SHEET - 2/2] 18/19
- DVI Circuit 19/19

CIRCUIT BLOCK DIAGRAM



65HDX82
BLOCK DIAGRAM

SPECIFICATIONS

TELEVISION SYSTEM	NTSC standard
CHANNEL COVERAGE	VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mid band (A-8 through A-1, A through I) Super band (J through W) Hyper band (AA through ZZ, AAA, BBB) Ultra band (65 through 94, 100 through 125)
POWER SOURCE	120 V AC, 60 Hz
POWER CONSUMPTION	180W (Average)
AUDIO POWER	15 W + 15 W
SPEAKER TYPE	Two 6-5/16 inches (16 cm) round
VIDEO/AUDIO TERMINALS	S-VIDEO INPUT Y-INPUT: 1V (p-p), 75 ohm, negative sync. C-INPUT: 0.286 V(p-p) (burst signal), 75 ohm VIDEO/AUDIO INPUT VIDEO: 1 V(p-p), 75 ohm, negative sync. AUDIO: 150 mV(rms) (30% modulation equivalent, 47 kohm) ColorStream™ (Component video) INPUT Y-INPUT: 1 V(p-p), 75 ohm P_R-INPUT: 0.7 V(p-p), 75 ohm P_B-INPUT: 0.7 V(p-p), 75 ohm AUDIO: 150mV(rms). 47 kohm VIDEO/AUDIO OUTPUT VIDEO: 1 V(p-p), 75 ohm, negative sync. AUDIO: 150 mV(rms) (30% modulation equivalent, 4.7 kohm) VARIABLE AUDIO OUTPUT 0-300 mV(rms) (30% modulation equivalent, 4.7 kohm) AUDIO CENTER CHANNEL INPUT 300 mV(rms) (30% modulation equivalent, 10 kohm)
DIMENSIONS/MASS	

	Dimension (W/H/D)	Mass
65HDX82	59-1/2 x 60-7/8 x 26.0 inches (1,511 x 1,546 x 660 mm)	299 lbs (136 kg)

SUPPLIED ACCESSORIES	Remote Control with 2 size “AA” alkaline batteries

*Please refer to owner's manual in detail.

– END –

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

SCHEMATIC DIAGRAM

MODEL : 65HDX82

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  - (CRT) [SHEET - 1/2] 17/19
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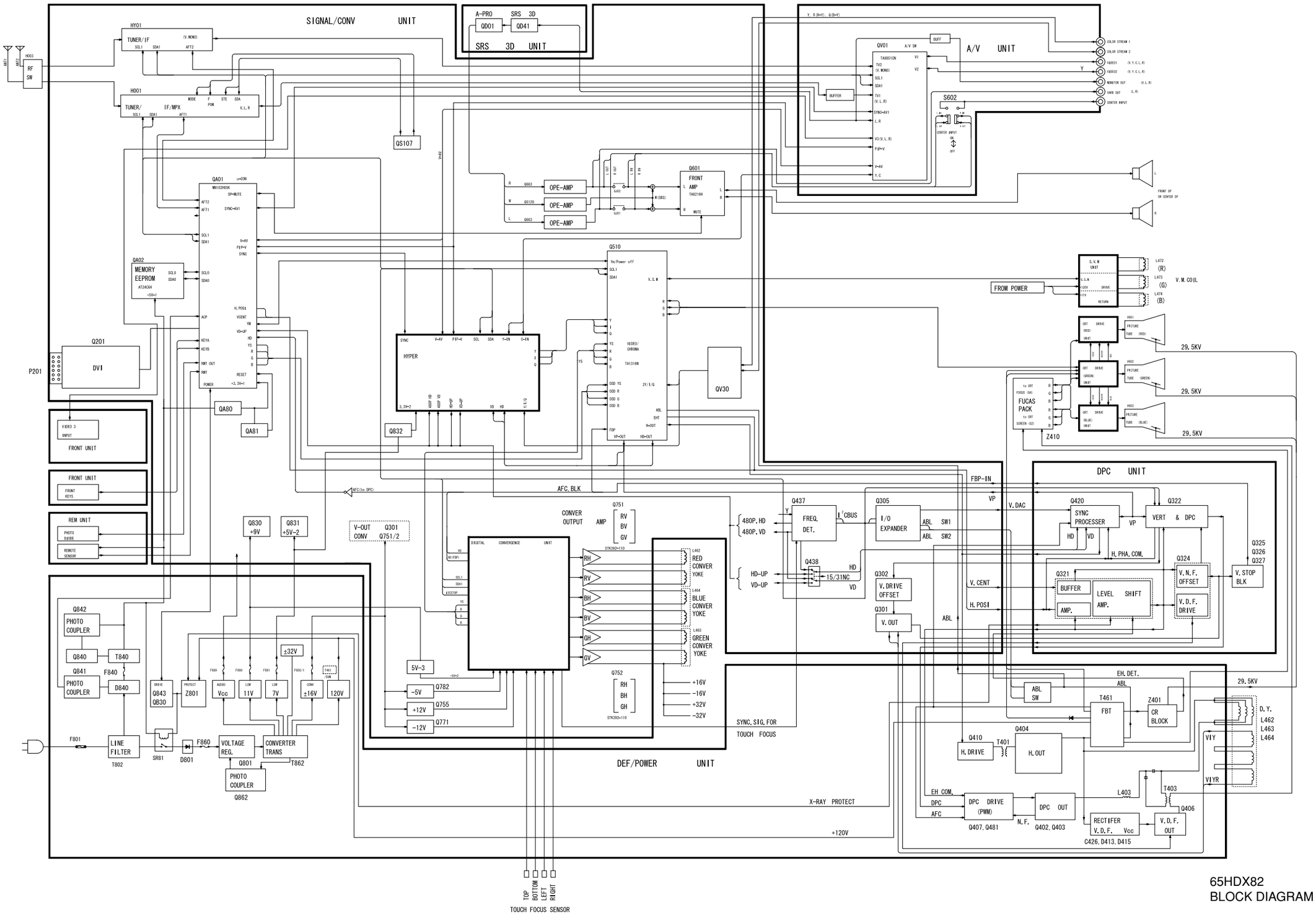
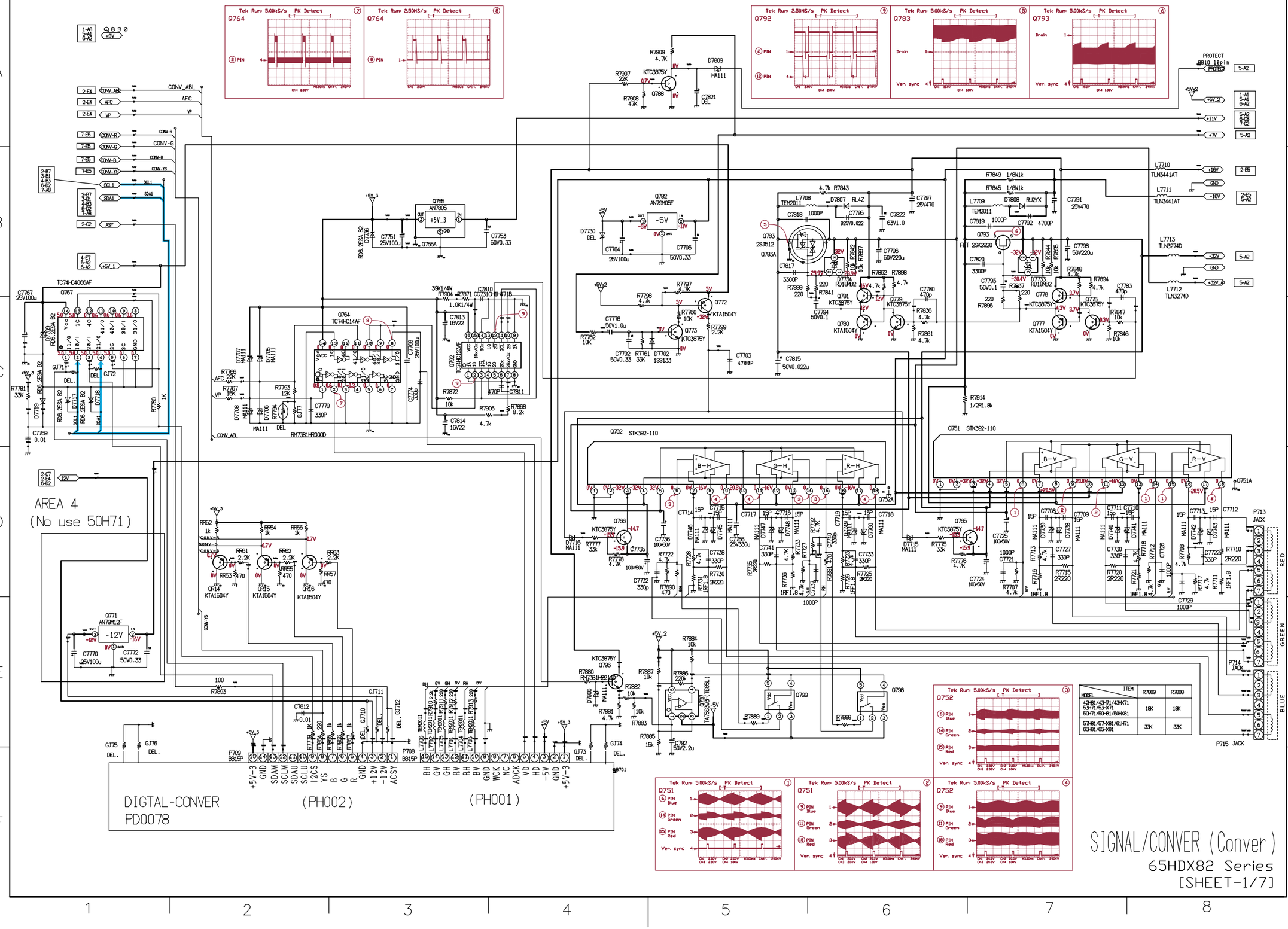
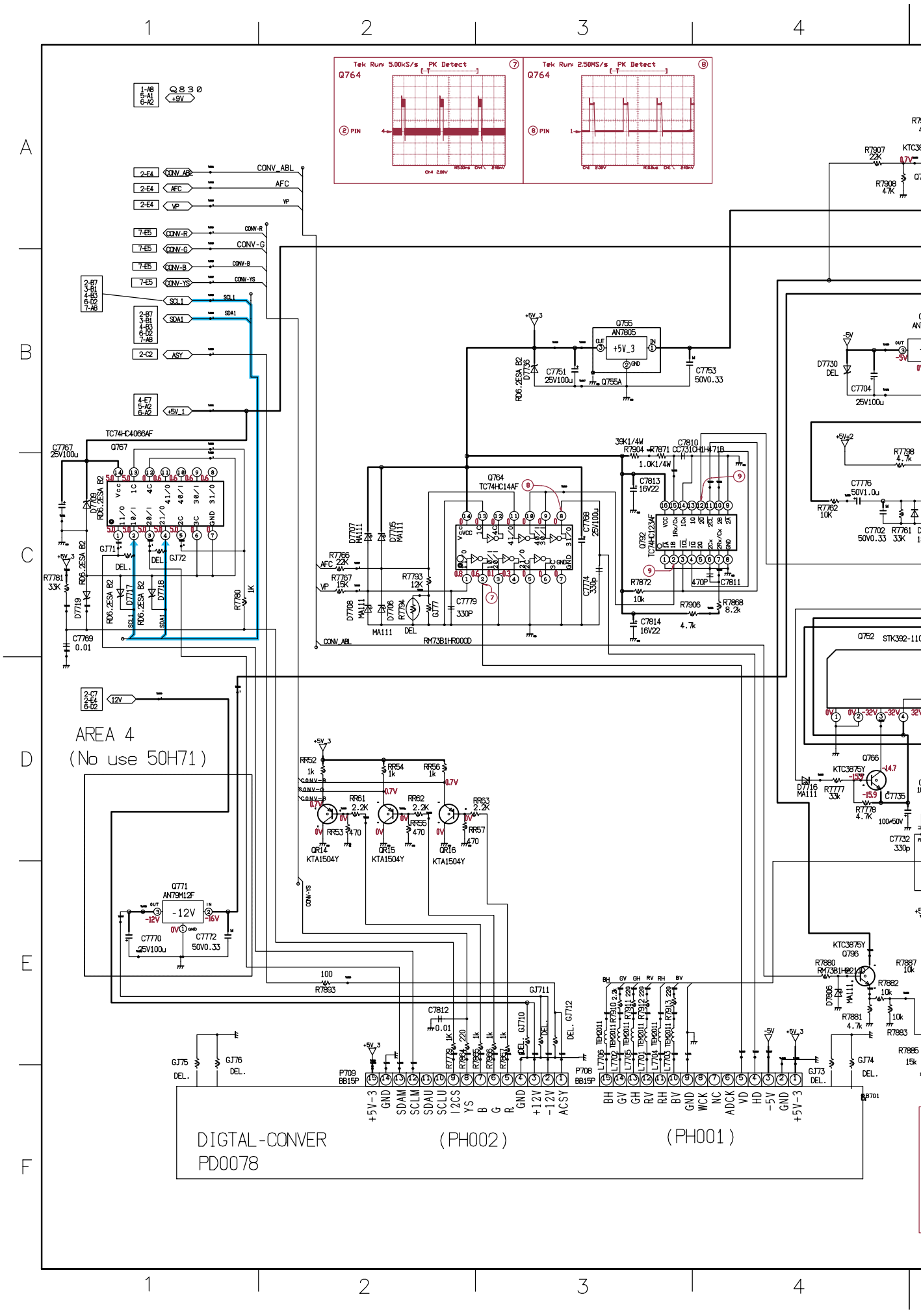
CIRCUIT BLOCK DIAGRAM



65HDX82
BLOCK DIAGRAM



ITEM / MODEL	R7889	R7888
42H81/43H71/43HX71 53H71/53HX71 50H71/50H81/50HX81	18K	18K
57H81/57HX81/61H71 65H81/65HX81	33K	33K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Q764
Tek Run: 2.50MS/s PK Detect
Q764
Q830
+9V
CONV_ABL
AFC
VP
CONV-R
CONV-G
CONV-B
CONV-YS
SCL1
SDA1
ASY
+5V_1
TC74HC4066AF
Q767
Q755
AN7805
+5V_3
Q764
TC74HC14AF
Q752
STK392-110
Q766
KTC3875Y
Q771
AN79M12F
-12V
Q796
RM73B1HR000D
AREA 4
(No use 50H71)
DIGTAL-CONVER
PD0078
(PH002)
(PH001)
P709
BB15P
P708
BB15P
+5V-3
GND
SDAM
SCLM
SDAU
SCLU
I2CS
YS
B
G
R
GND
+12V
-12V
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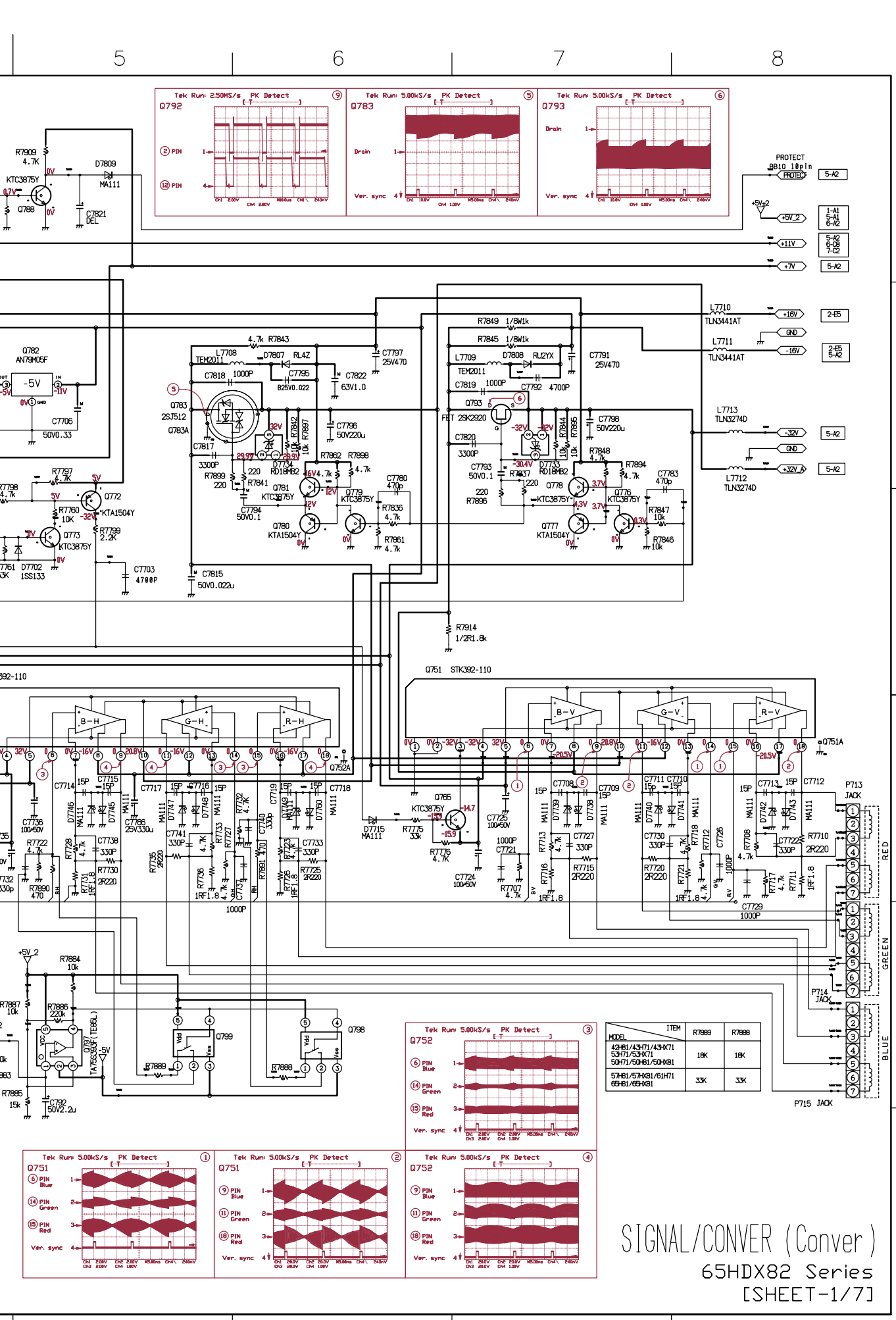
ADCK
VD
HD
-5V
GND
+5V-3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Q783
Q793
PROTECT
+5V_2
+11V
+7V
+16V
-16V
-32V
+32V_A
GND
L7710 TLN3441AT
L7711 TLN3441AT
L7713 TLN3274D
L7712 TLN3274D
Q782 AN79M05F
-5V
Q772 KTA1504Y
Q773 KTC3875Y
Q780 KTA1504Y
Q781 KTC3875Y
Q779 KTC3875Y
Q778 KTC3875Y
Q776 KTC3875Y
Q777 KTA1504Y
Q783 2SJ512
FET 2SK2920
Q751 STK392-110
Q752A
Q751A
B-H
G-H
R-H
B-V
G-V
R-V
Q765 KTC3875Y
Q799
Q798
TA75393F (TEBEL)
P713 JACK
P714 JACK
P715 JACK
RED
GREEN
BLUE
ITEM
MODEL
R7889
R7888
42HB1/43H71/43HX71
53H71/53HX71
50H71/50HB1/50HX81
18K
18K
57HB1/57HX81/61H71
65HB1/65HX81
33K
33K
Tek Run: 2.50MS/s PK Detect
Tek Run: 5.00kS/s PK Detect
Tek Run: 5.00kS/s PK Detect
Q751
Q752
SIGNAL/CONVER (Conver)
65HDX82 Series
[SHEET-1/7]

SIGNAL/CONVER(Deflection)

65HDX82 Series

[SHEET-2/7]

TO DPC PD0077(P350)

P410 SDDET BB-2SP

BB30 BP 2.5PJ-P

BB20 BB 16P BLUG

TO DEF/POWER PD0074(BB31)

TO DEF/POWER PD0074(BB31)

SIGNAL/CONVER (Vertical)

① 2V/div 5ms/div

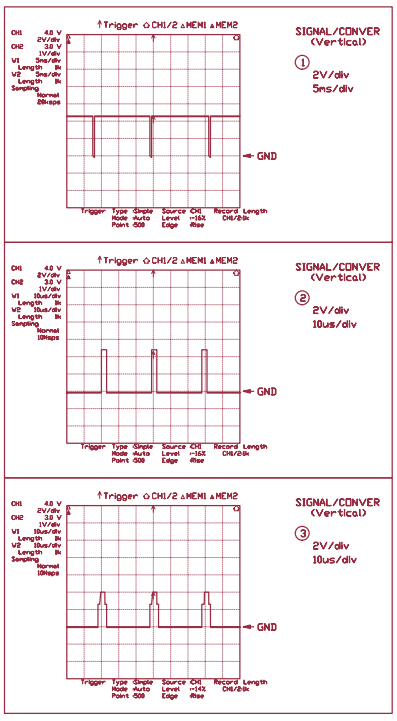
② 2V/div 10us/div

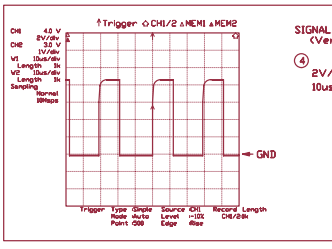
③ 2V/div 10us/div

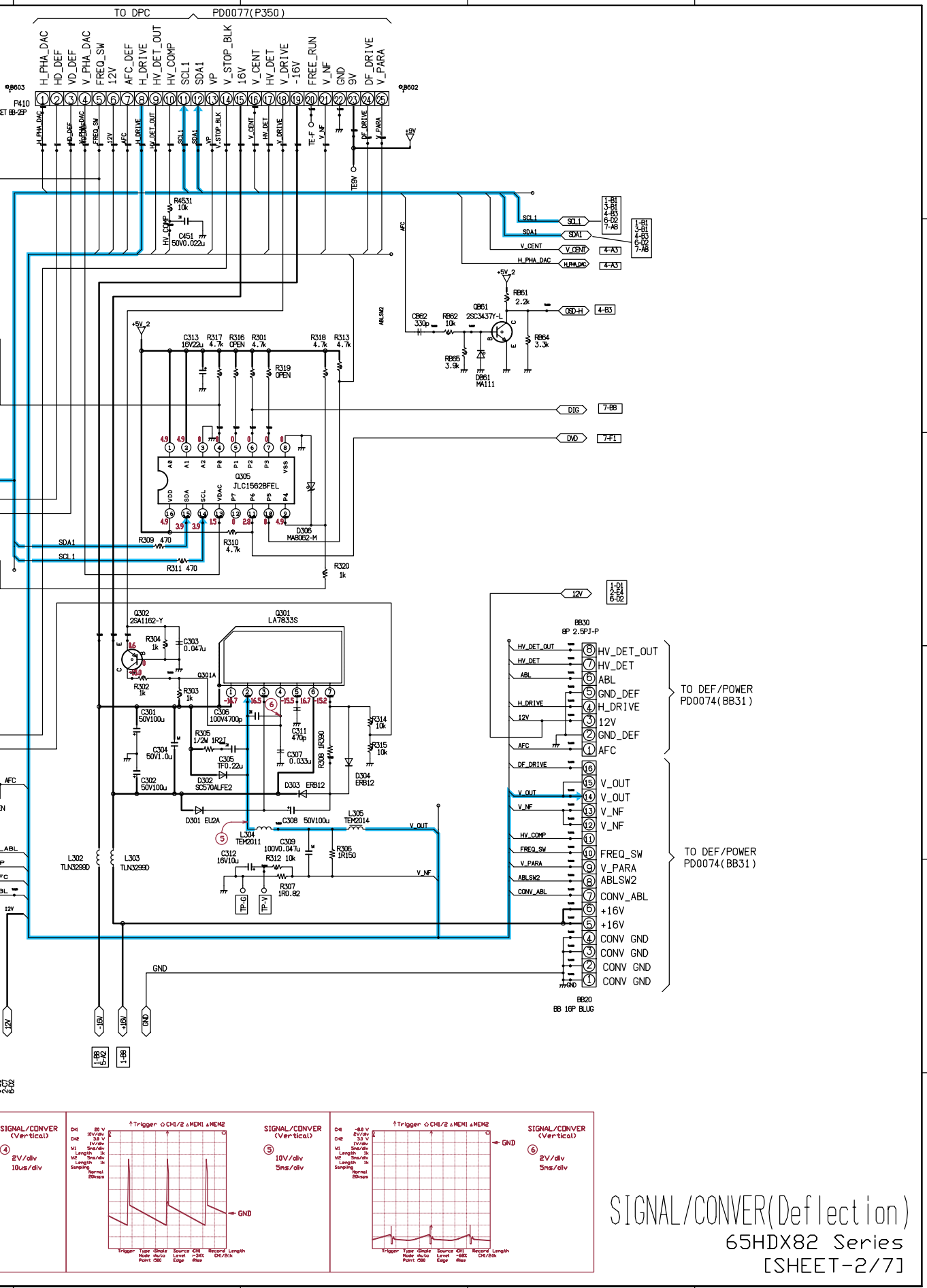
④ 2V/div 10us/div

⑤ 10V/div 5ms/div

⑥ 2V/div 5ms/div


Trigger CH1/2 MEM1 MEM2
GND
SIGNAL/CONVER
(Vertical)
① 2V/div
5ms/div
SIGNAL/CONVER
(Vertical)
② 2V/div
10us/div
SIGNAL/CONVER
(Vertical)
③ 2V/div
10us/div

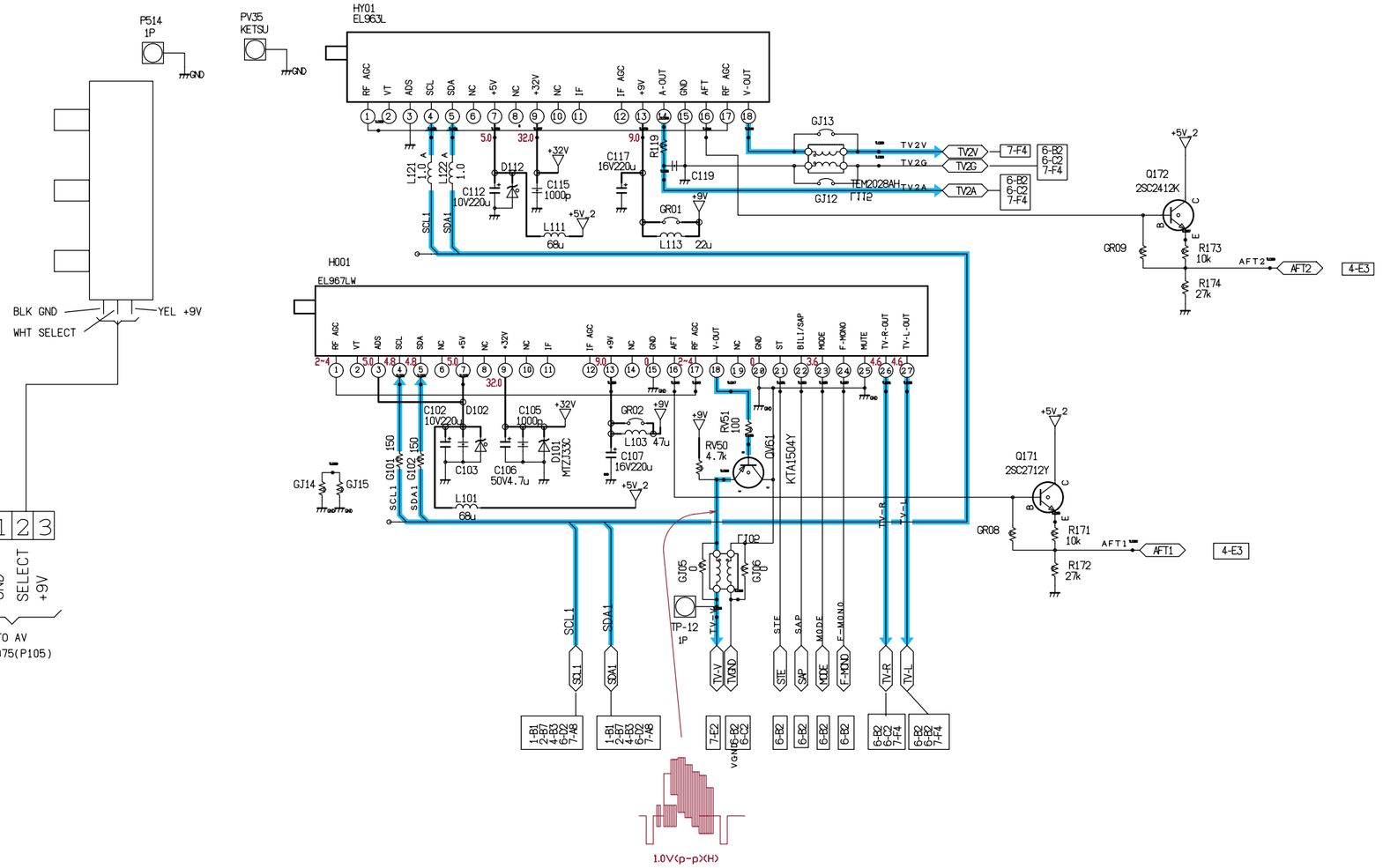

Trigger CH1/2 MEM1 MEM2
GND



SIGNAL/CONVER(Deflection)

65HDX82 Series

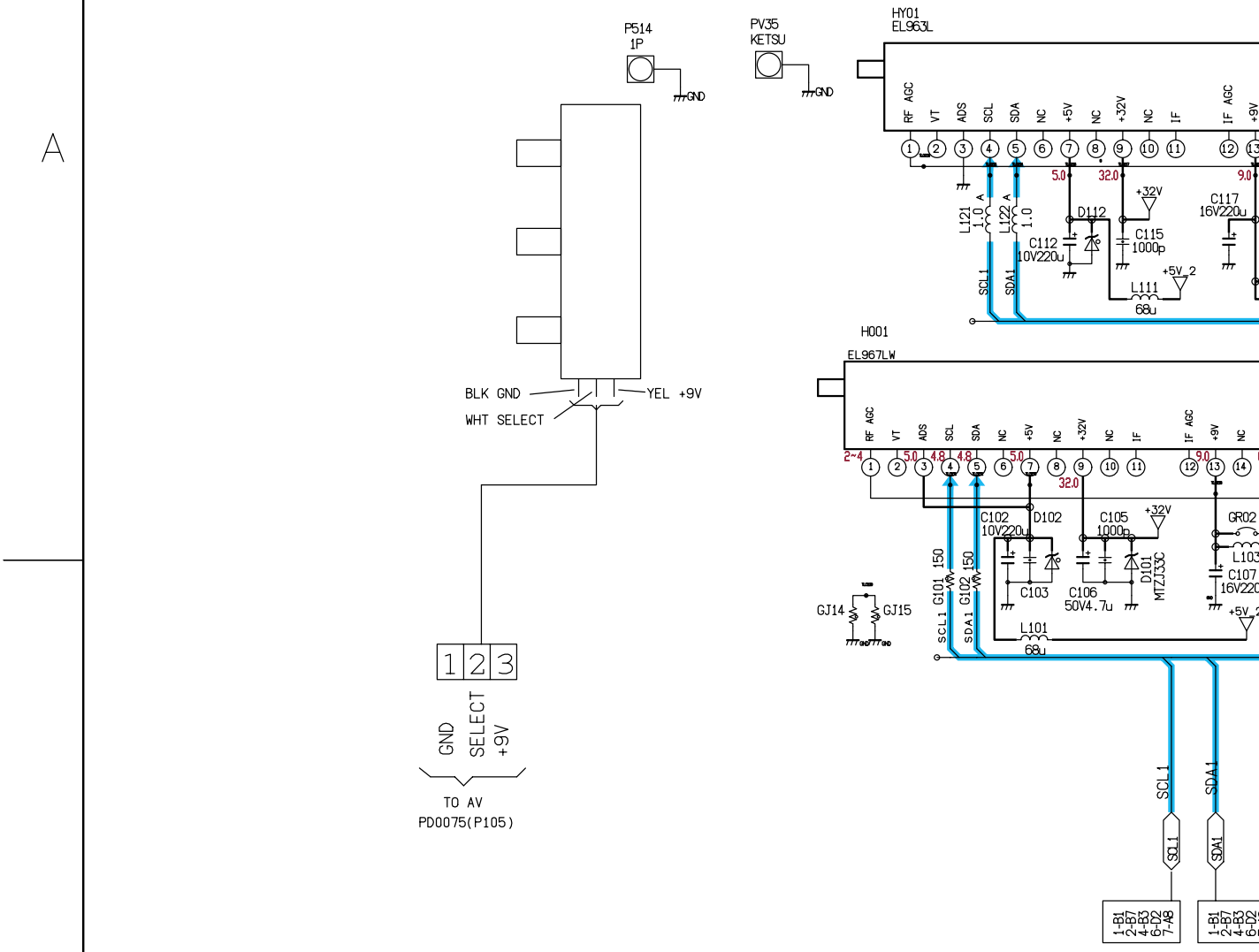
[SHEET-2/7]

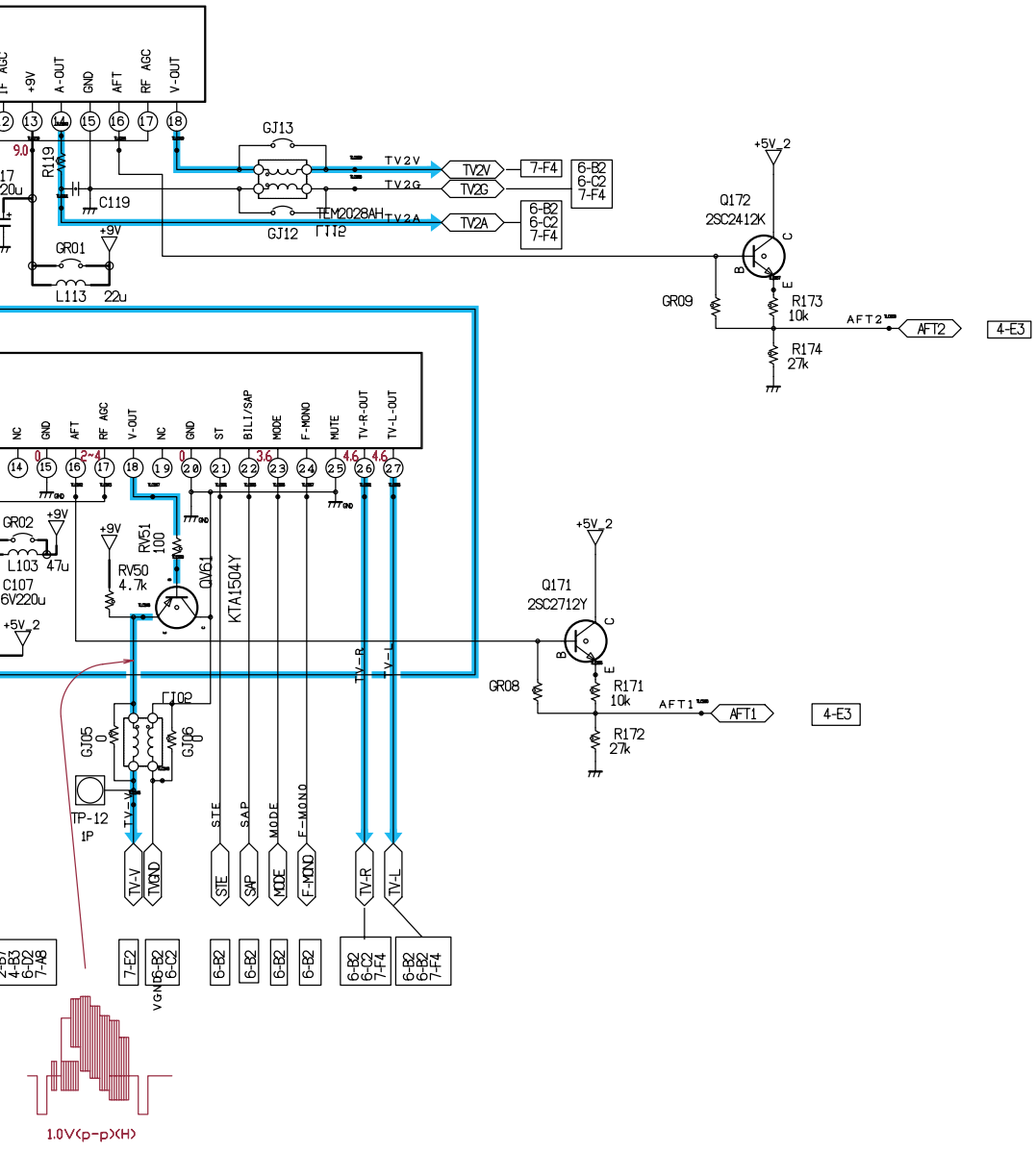


SIGNAL/CONVER(If)

65HDX82 Series

[SHEET-3/7]


P514
1P
GND
PV35
KETSU
GND
HY01
EL963L
RF AGC
VT
ADS
SCL
SDA
NC
+5V
NC
+32V
NC
IF
IF AGC
+9V
5.0
32.0
9.0
+32V
C117
16V220u
L121
1.0 A
L122
1.0 A
D112
C115
1000p
C112
10V220u
+5V_2
L111
68u
SCL1
SDA1
H001
EL967LW
RF AGC
VT
ADS
SCL
SDA
NC
+5V
NC
+32V
NC
IF
IF AGC
+9V
NC
2~4
5.0
4.8
4.8
5.0
32.0
9.0
C102
10V220u
D102
C105
1000p
+32V
GR02
L103
C107
16V220
C103
C106
50V4.7u
D101
MTZJ33C
+5V
L101
68u
G101
150
G102
150
SCL1
SDA1
GJ14
GJ15
BLK GND
YEL +9V
WHT SELECT
1
2
3
GND
SELECT
+9V
TO AV
PD0075(P105)
SCL1
SDA1
SCL1
SDA1
1-B1
2-B7
4-B3
6-D2
7-A8
1-B1
2-B7
4-B3
6-D2



A

B

SIGNAL/CONVER(If)

65HDX82 Series

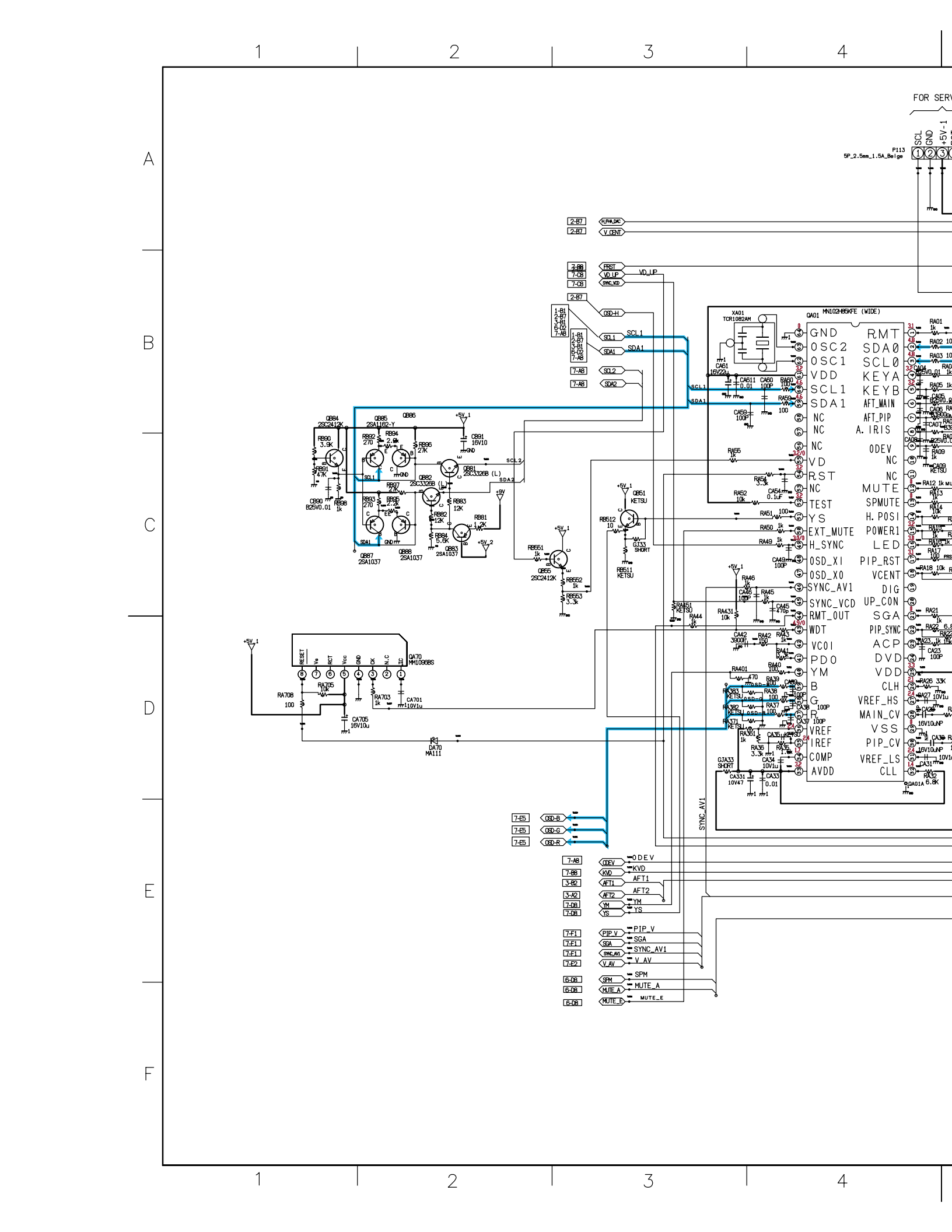
[SHEET-3/7]

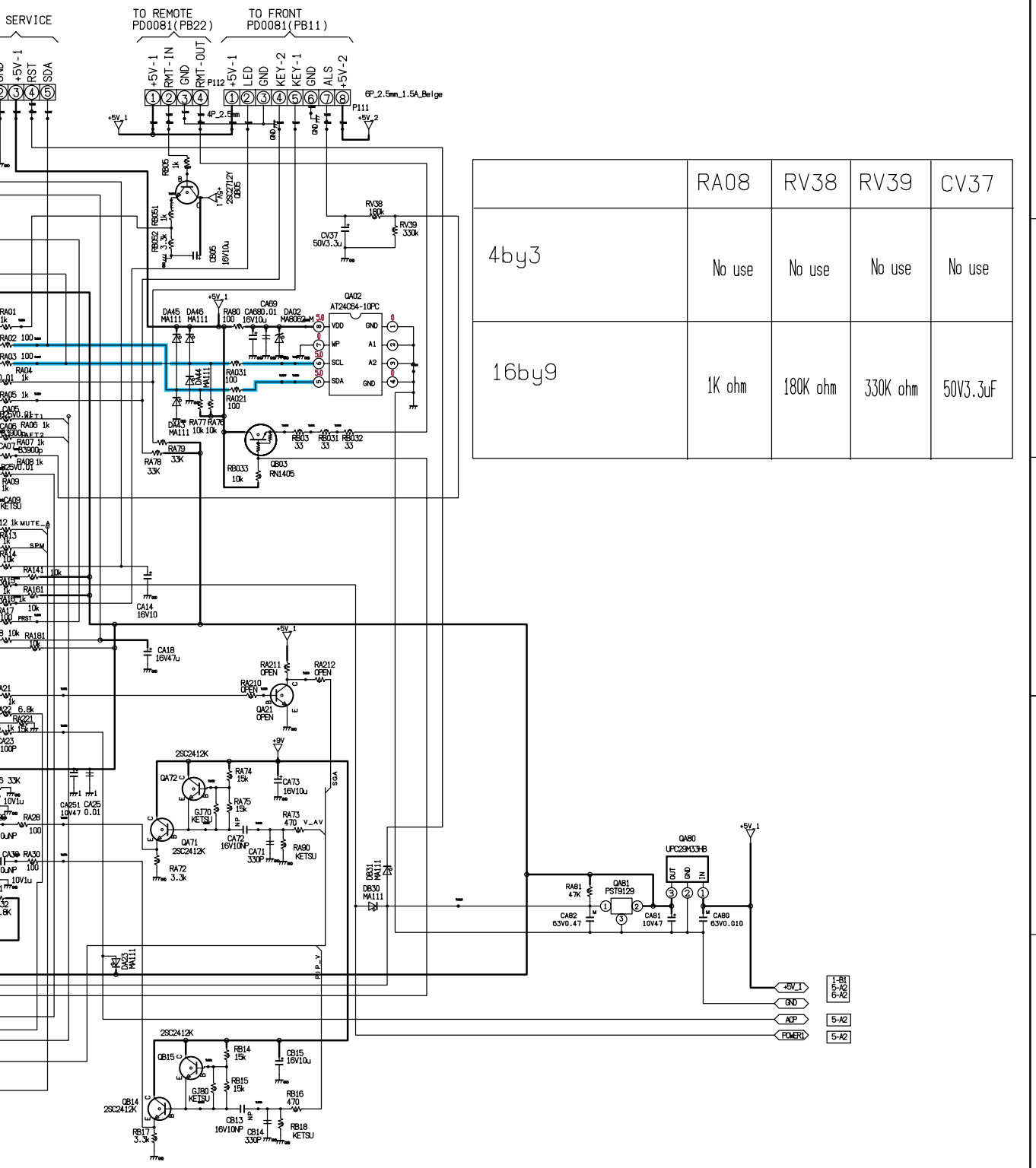
	RA08	RV38	RV39	CV37
4by3	No use	No use	No use	No use
16by9	1K ohm	180K ohm	330K ohm	50V3.3uF

SIGNAL/CONVER(Maicon)

65HDX82 Series

[SHEET-4/7]


FOR SERV
P113
5P_2.5mm_1.5A_Beige
SCL
GND
+5V-1
XA01
TCR1082AM
QA01
MN102H85KFE (WIDE)
GND
OSC2
OSC1
VDD
SCL1
SDA1
NC
NC
VD
RST
NC
TEST
YS
EXT_MUTE
H_SYNC
OSD_XI
OSD_XO
SYNC_AV1
SYNC_VCD
RMT_OUT
WDT
VCO1
PDO
YM
B
G
R
VREF
IREF
COMP
AVDD
RMT
SDA0
SCL0
KEYA
KEYB
AFT_MAIN
AFT_PIP
A. IRIS
ODEV
NC
NC
MUTE
SPMUTE
H. POSI
POWER1
LED
PIP_RST
VCENT
DIG
UP_CON
SGA
PIP_SYNC
ACP
DVD
VDD
CLH
VREF_HS
MAIN_CV
VSS
PIP_CV
VREF_LS
CLL
QA70
MM1096BS
RESET
Vs
RCT
Vcc
GND
CK
N.C
IC
VD_UP
SCL_1
SDA1
SCL_2
SDA2
SYNC_AV1
ODEV
KVD
AFT1
AFT2
YM
YS
PIP_V
SGA
SYNC_AV1
V_AV
SPM
MUTE_A
MUTE_E
OSD-B
OSD-G
OSD-R

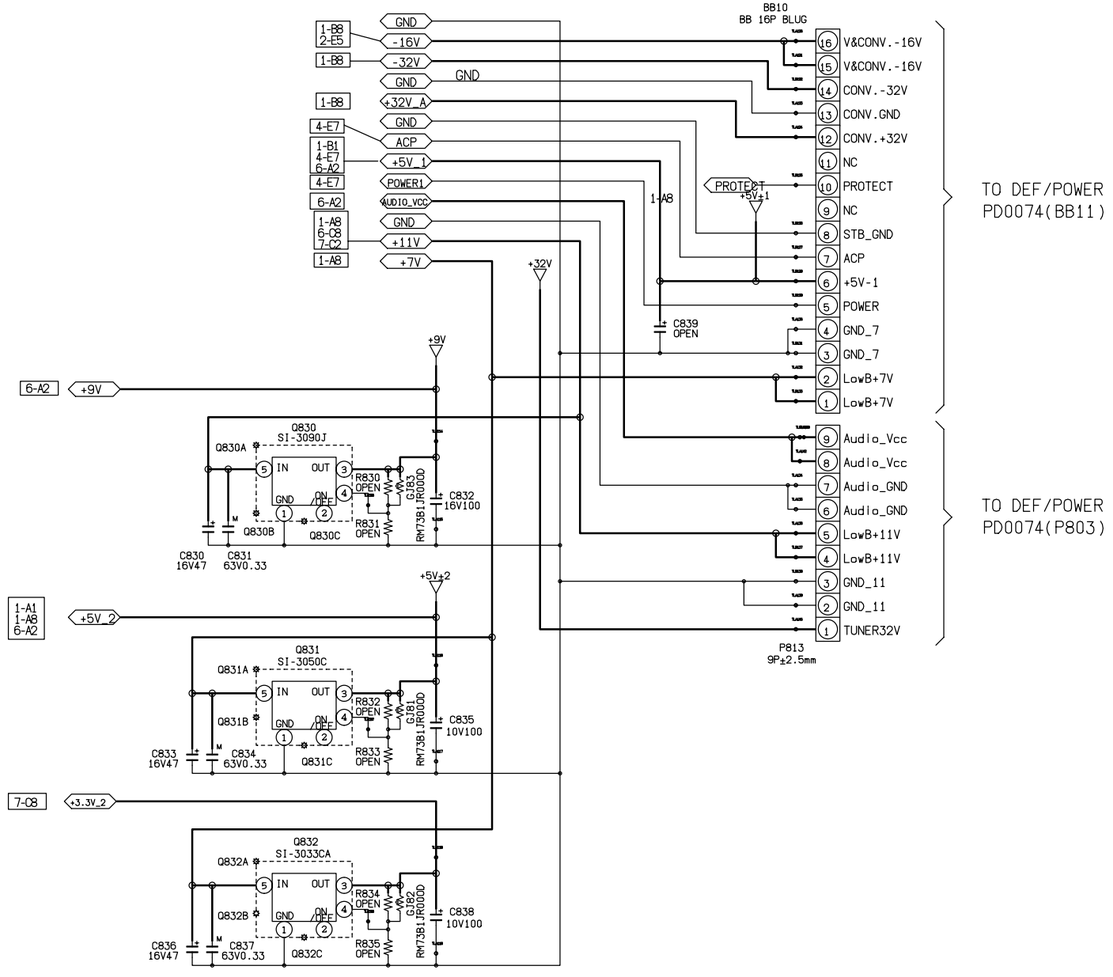


	RA08	RV38	RV39	CV37
4by3	No use	No use	No use	No use
16by9	1K ohm	180K ohm	330K ohm	50V3.3uF

SIGNAL/CONVER(Maicon)

65HDX82 Series

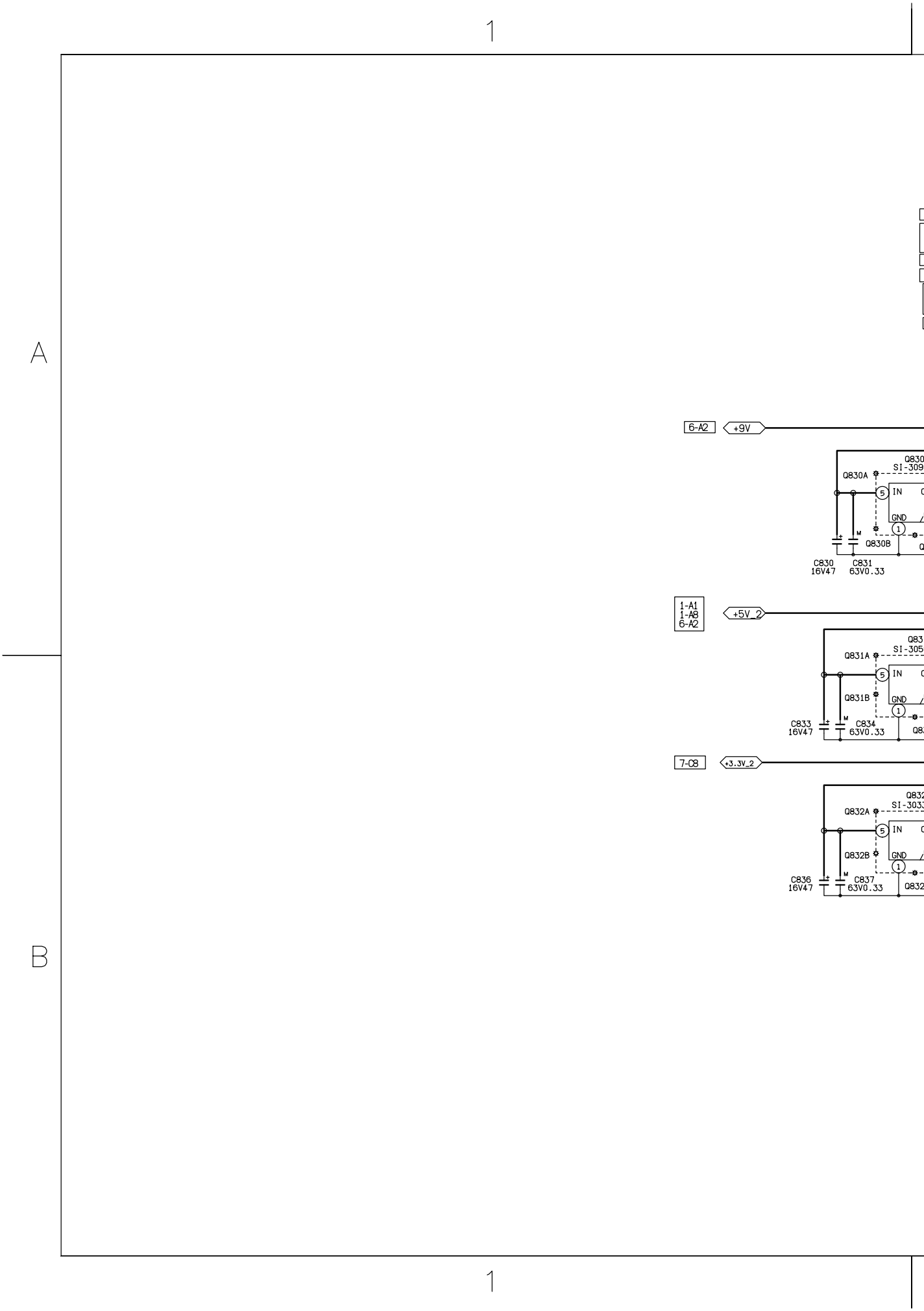
[SHEET-4/7]

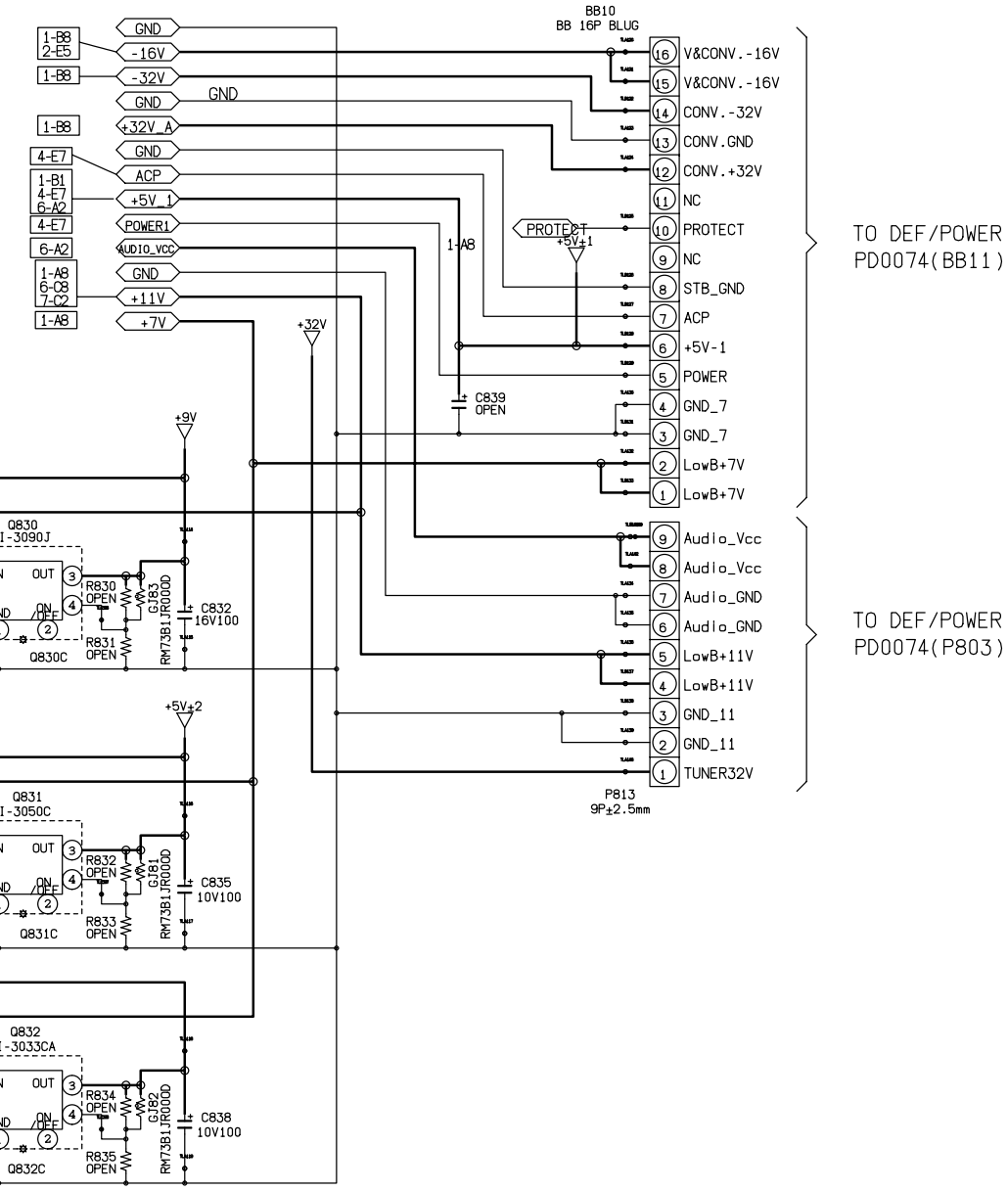


SIGNAL/CONVER(Power)

65HDX82 Series

[SHEET-5/7]


1
A
B
1
6-A2
+9V
Q830A
Q830B
C830
16V47
C831
63V0.33
1-A1
1-A8
6-A2
+5V_2
Q831A
Q831B
C833
16V47
C834
63V0.33
7-C8
+3.3V_2
Q832A
Q832B
C836
16V47
C837
63V0.33



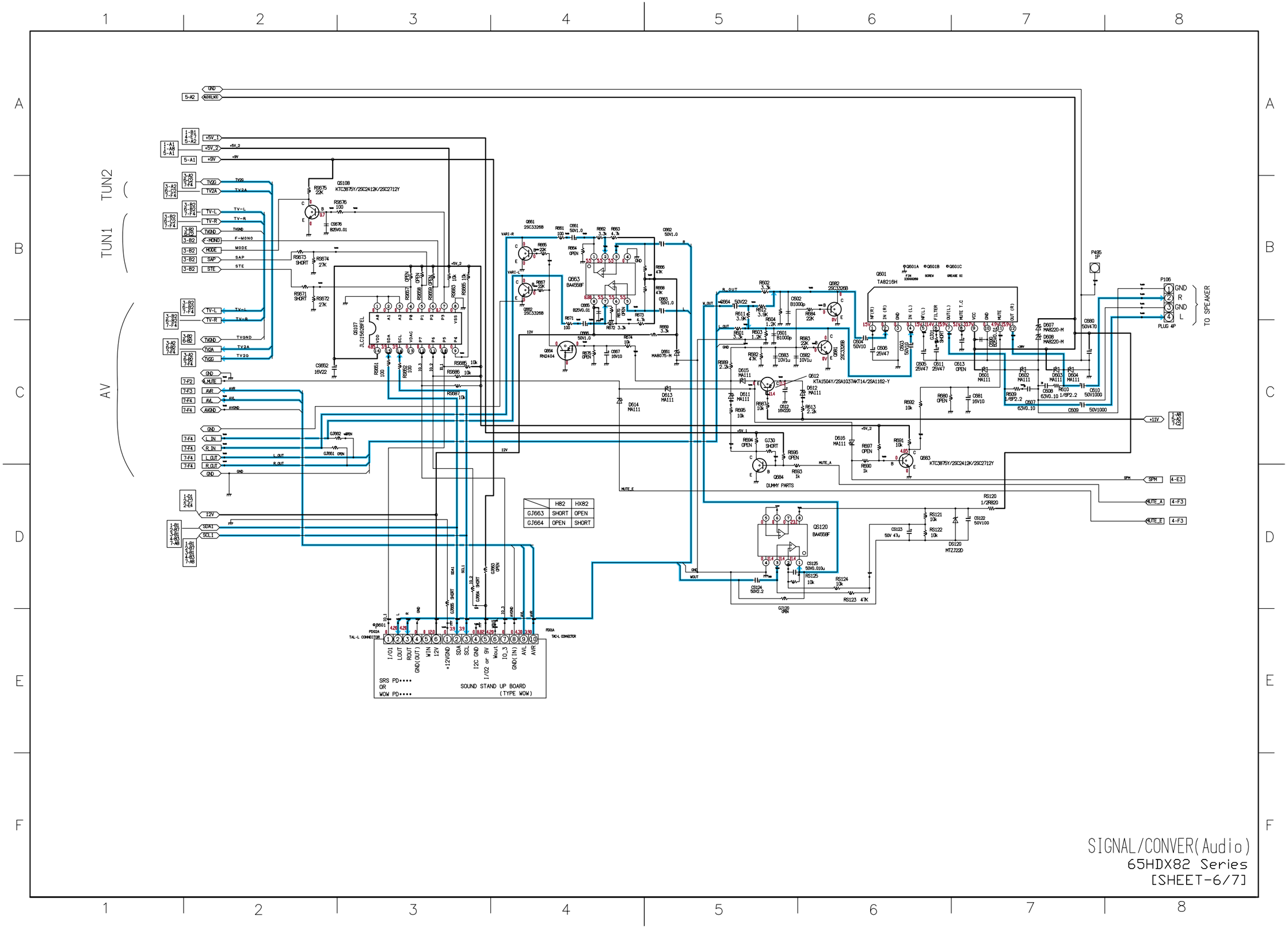
A

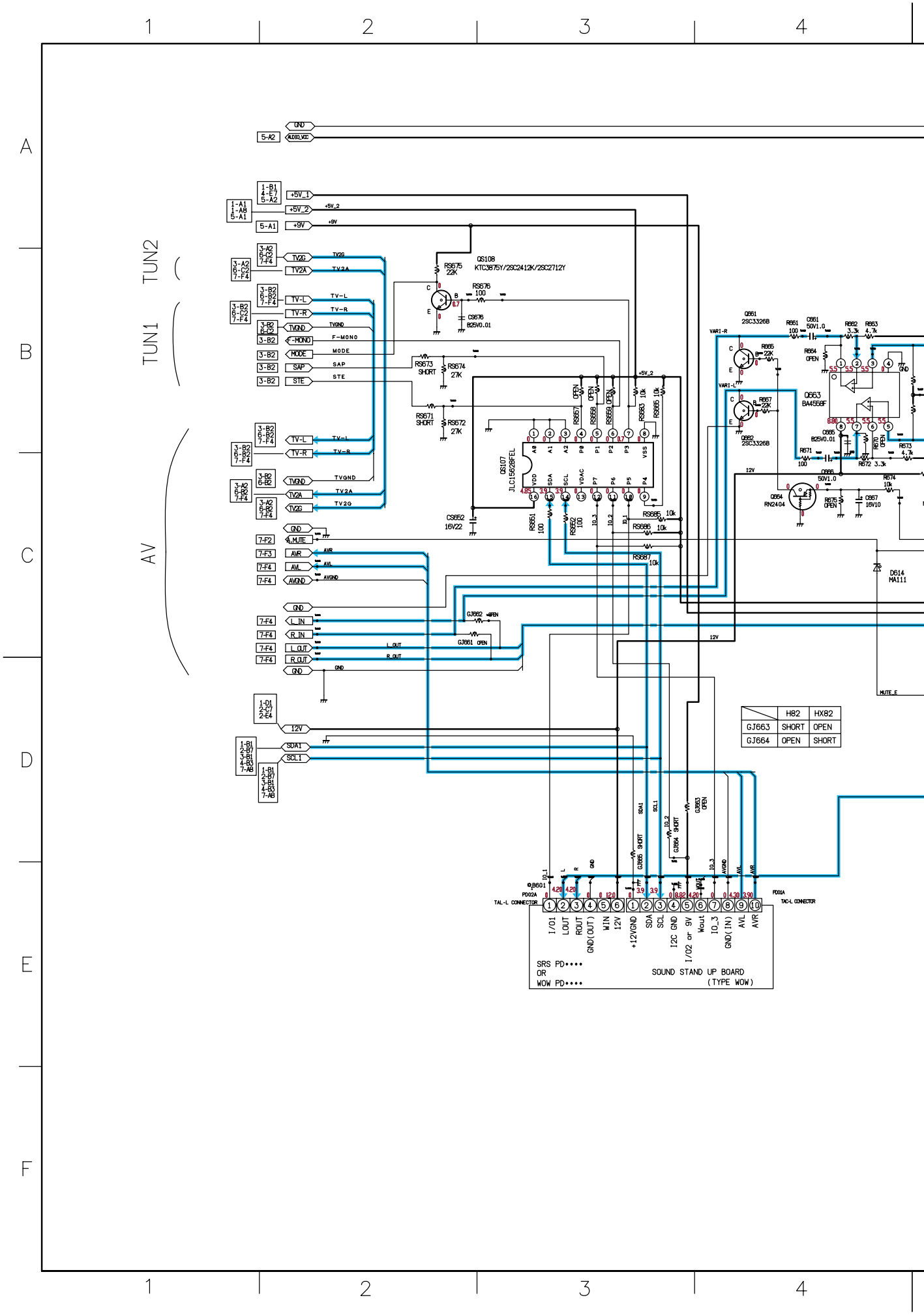
B

SIGNAL/CONVER(Power)

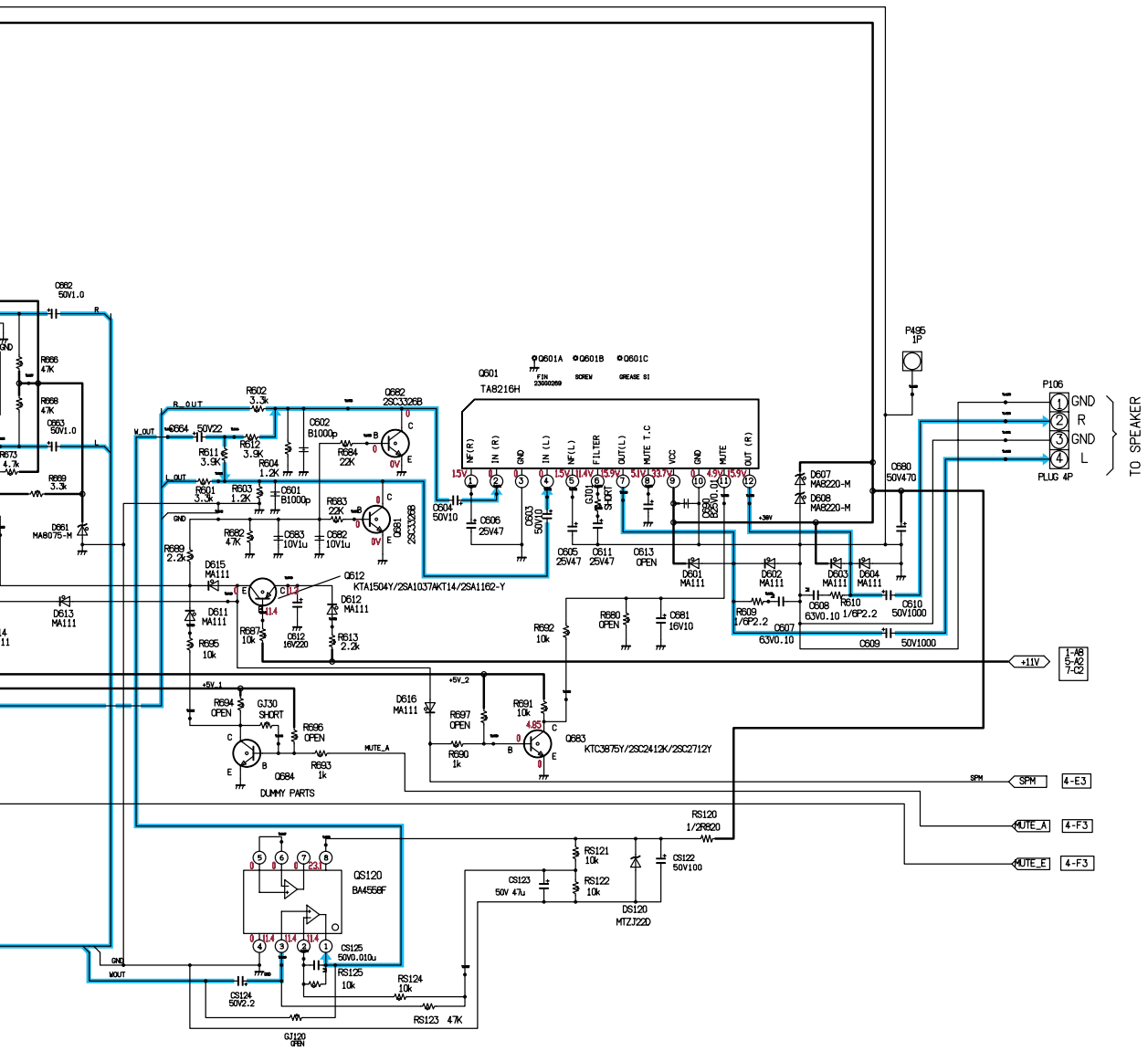
65HDX82 Series

[SHEET-5/7]


TUN2
TUN1
AV
GND
AUDIO_VCC
+5V_1
+5V_2
+9V
TV2G
TV2A
TV-L
TV-R
TVGND
F-MONO
MODE
SAP
STE
TV2A
TV2G
GND
MUTE
AVR
AVL
AVGND
L_IN
R_IN
L_OUT
R_OUT
12V
SDA1
SCL1
QS108 KTC3875Y/2SC2412K/2SC2712Y
QS107 JLC1562BFEL
Q661 2SC3326B
Q663 BA4558F
Q664 RN2404
Q665 2SC3326B
Q666 2SC3326B
Q667 2SC3326B
Q501 TA8216H
Q512 KTA1504Y/2SA1037AKT14/2SA1162-Y
Q983 KTC3875Y/2SC2412K/2SC2712Y
Q984 DUMMY PARTS
QS120 BA4558F
P106 TO SPEAKER PLUG 4P
P495 1P
SRS PD•••• OR WOW PD•••• SOUND STAND UP BOARD (TYPE WOW)
TAL-L CONNECTOR
TAC-L CONNECTOR
SPM
MUTE_A
MUTE_E
+11V
H82 HX82
GJ663 SHORT OPEN
GJ664 OPEN SHORT
SIGNAL/CONVER(Audio)
65HDX82 Series
[SHEET-6/7]



	H82	HX82
GJ663	SHORT	OPEN
GJ664	OPEN	SHORT



SIGNAL/CONVER(Audio)
65HDX82 Series
[SHEET-6/7]

HYPER
PD0264
NEXT HYPER

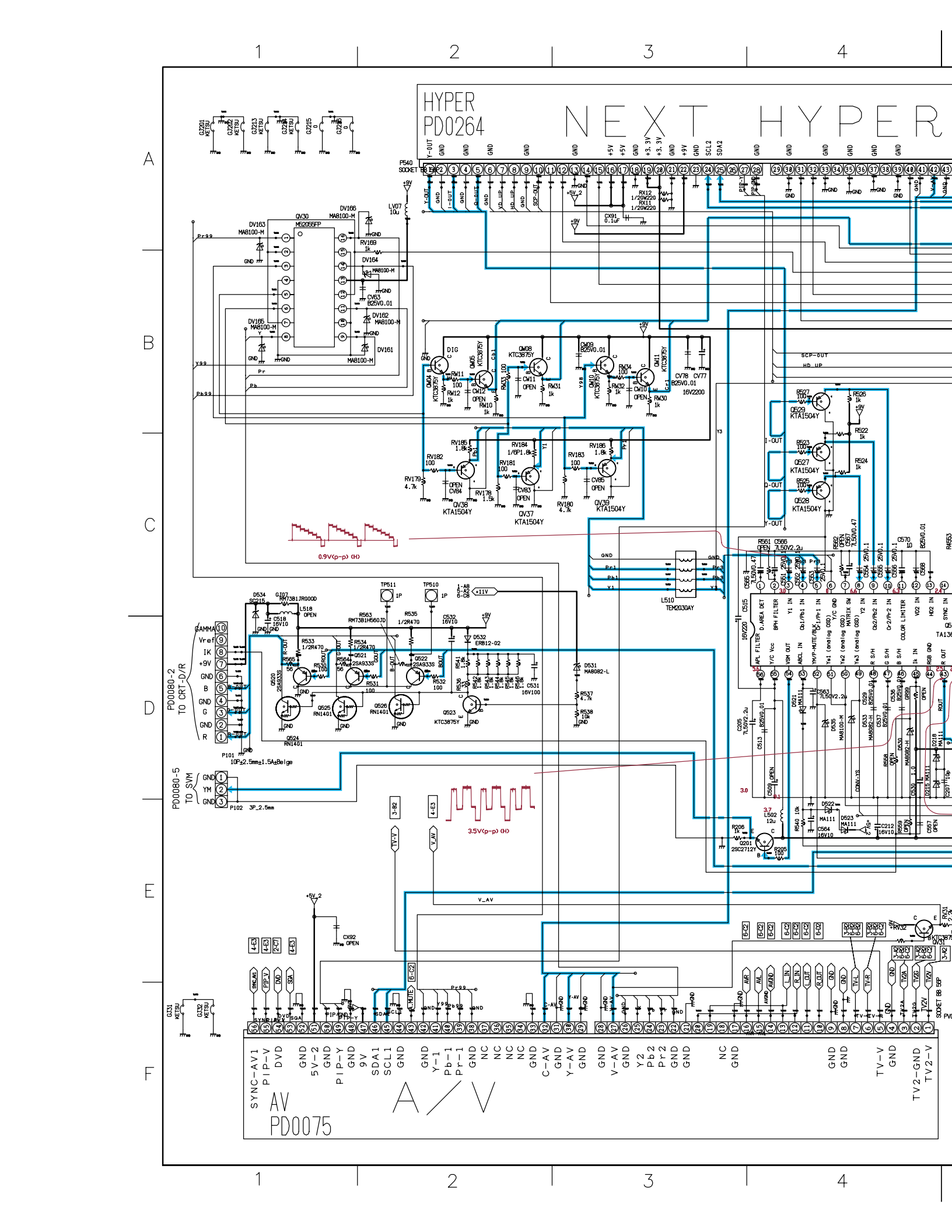
SIGNAL/CONVER(Video)
65HDX82 Series
[SHEET-7/7]

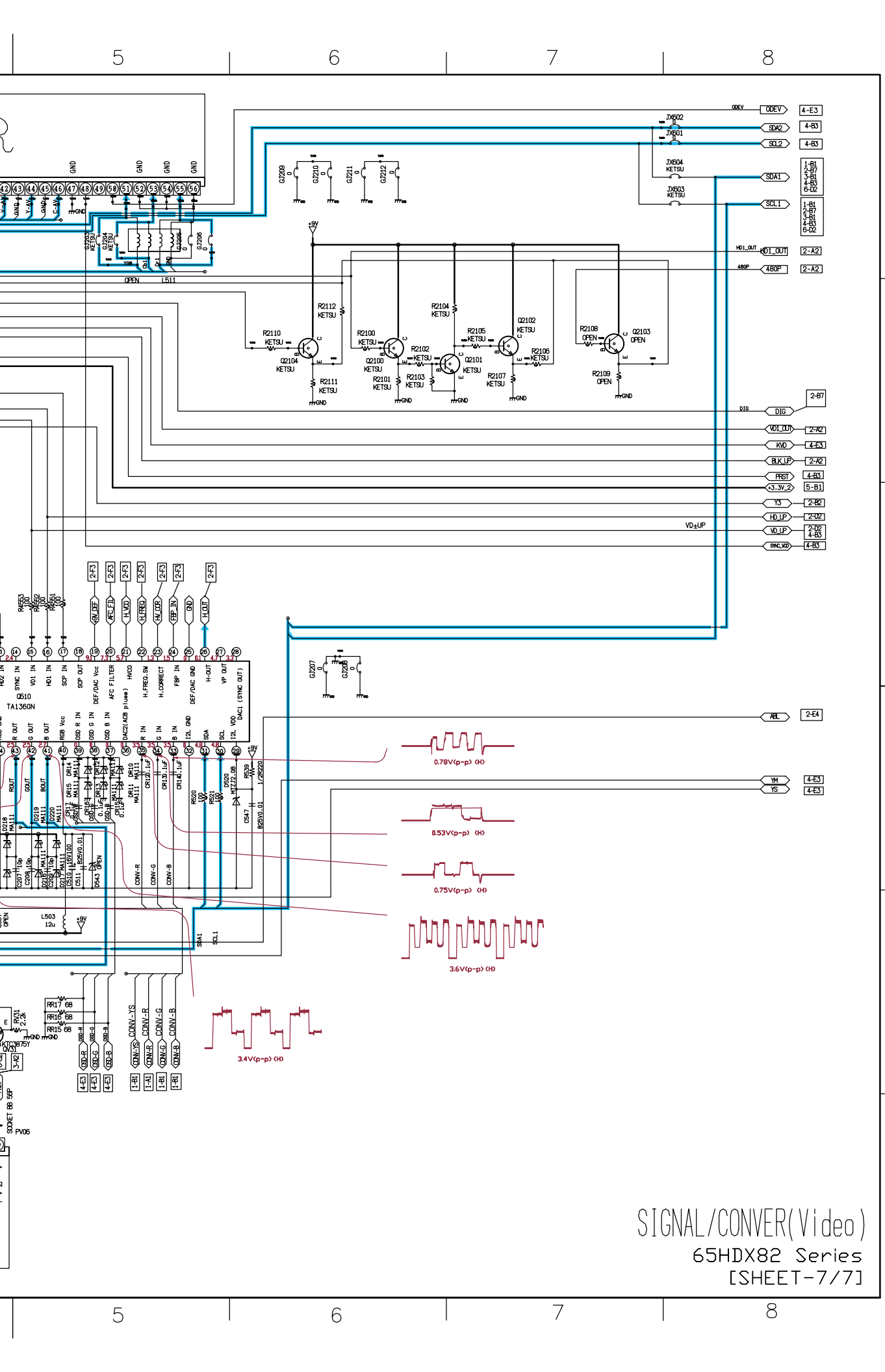
AV
PD0075
A/V

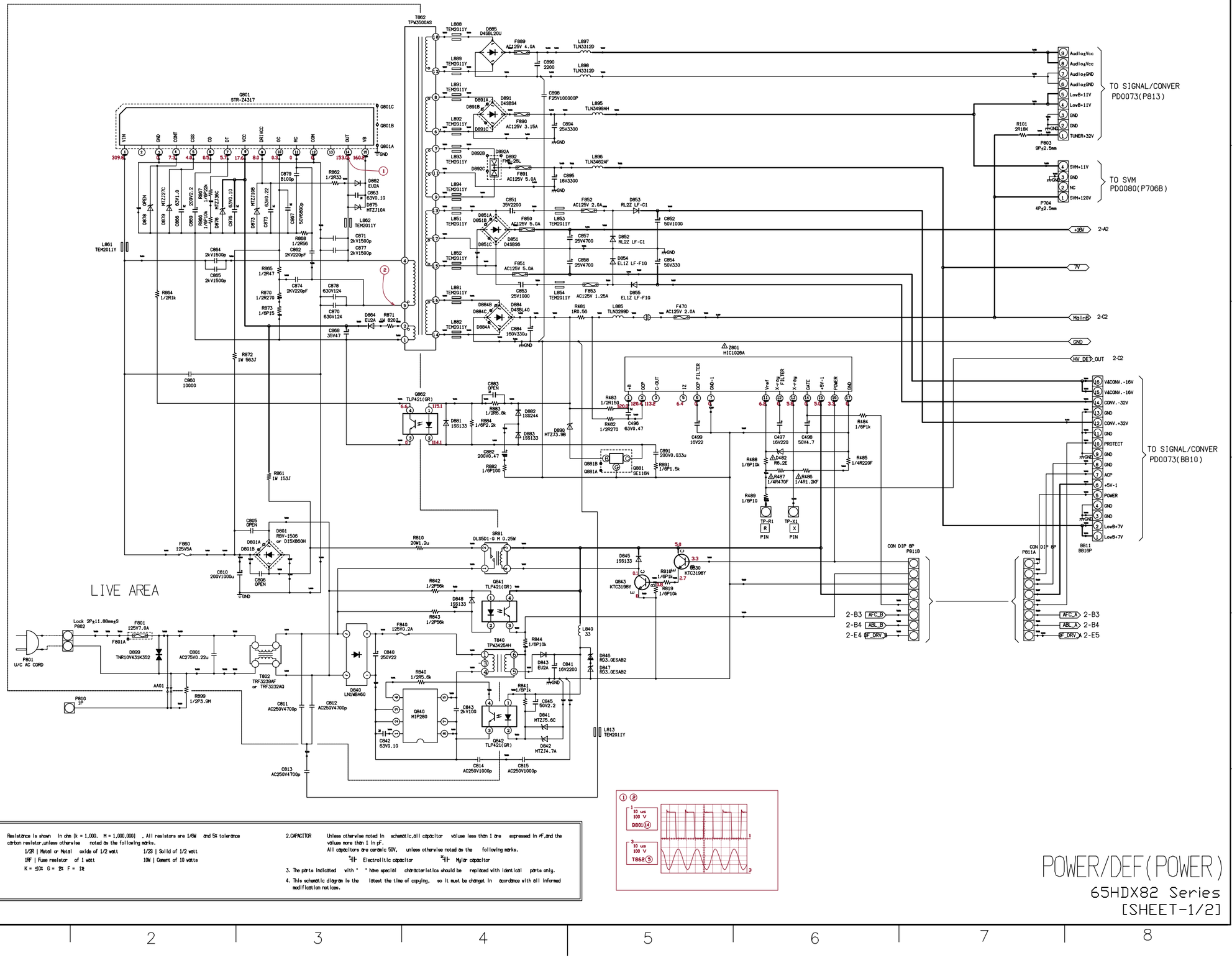
PD0080-2
TO CRT-D/R

PD0080-5
TO SVM

0.9V(p-p) (H)
0.78V(p-p) (H)
0.53V(p-p) (H)
0.75V(p-p) (H)
3.6V(p-p) (H)
3.5V(p-p) (H)
3.4V(p-p) (H)


HYPER
PD0264
NEXT HYPER
AV
PD0075
A / V
SYNC-AV1
PIP-V
DVD
GND
5V-2
GND
PIP-Y
GND
9V
SDA1
SCL1
GND
GND
Y-1
Pb-1
Pr-1
GND
NC
NC
NC
GND
C-AV
GND
Y-AV
GND
GND
V-AV
GND
Y2
Pb2
Pr2
GND
GND
NC
GND
GND
GND
TV-V
GND
TV2-GND
TV2-V
P540
SOCKET BB 43P
P101
10P±2.5mm±1.5A±Beige
P102
3P_2.5mm
PD0080-2
TO CRT-D/R
PD0080-5
TO SVM
L510
TEM2030AY
0.9V(p-p) (H)
3.5V(p-p) (H)
SCP-OUT
HD_UP
V_AV
TV-V
SOCKET BB 56P


5
6
7
8
A
B
C
D
E
F
TA1360N
0.78V(p-p) (H)
0.53V(p-p) (H)
0.75V(p-p) (H)
3.6V(p-p) (H)
3.4V(p-p) (H)
SIGNAL/CONVER(Video)
65HDX82 Series
[SHEET-7/7]



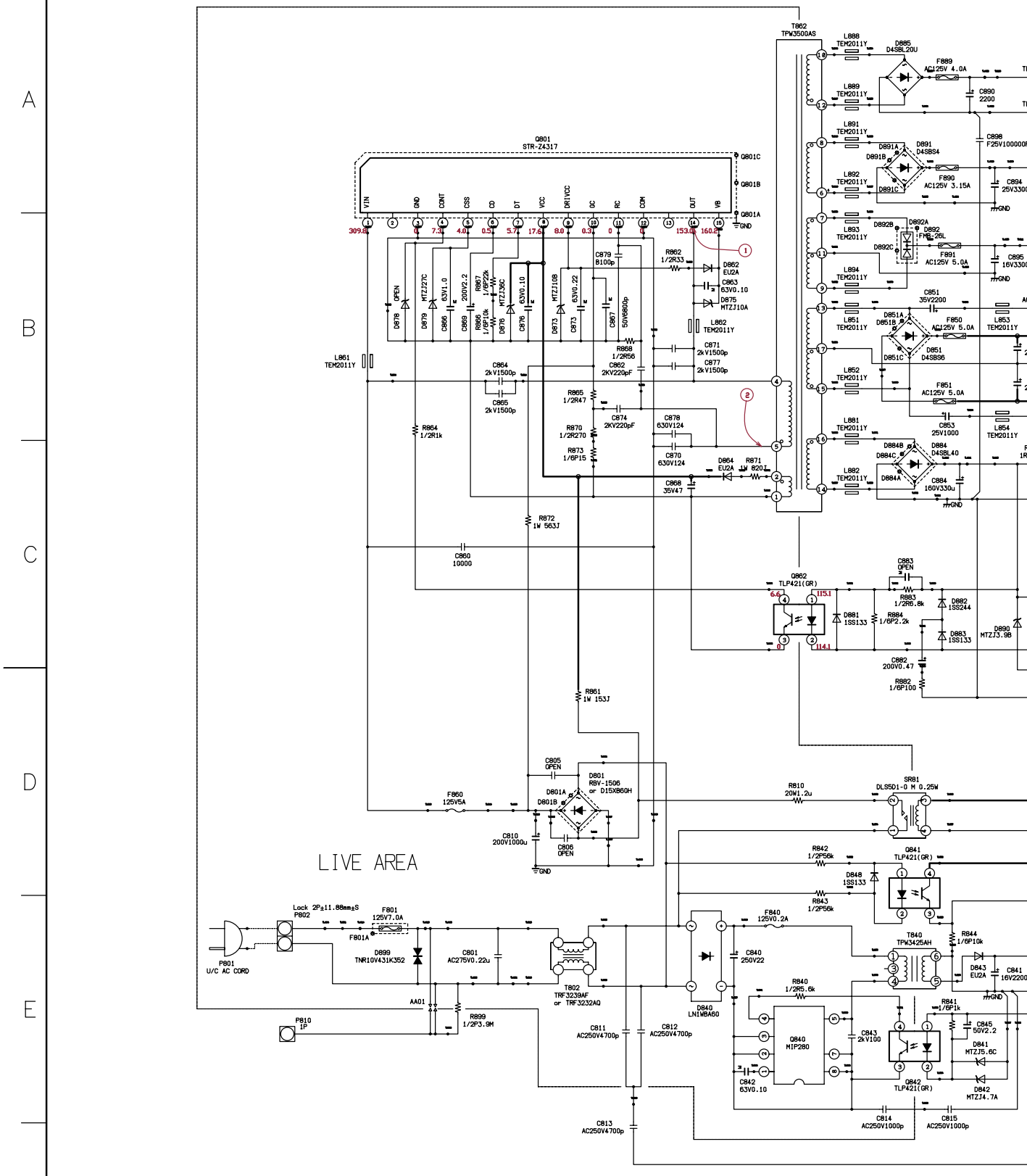
NOTE

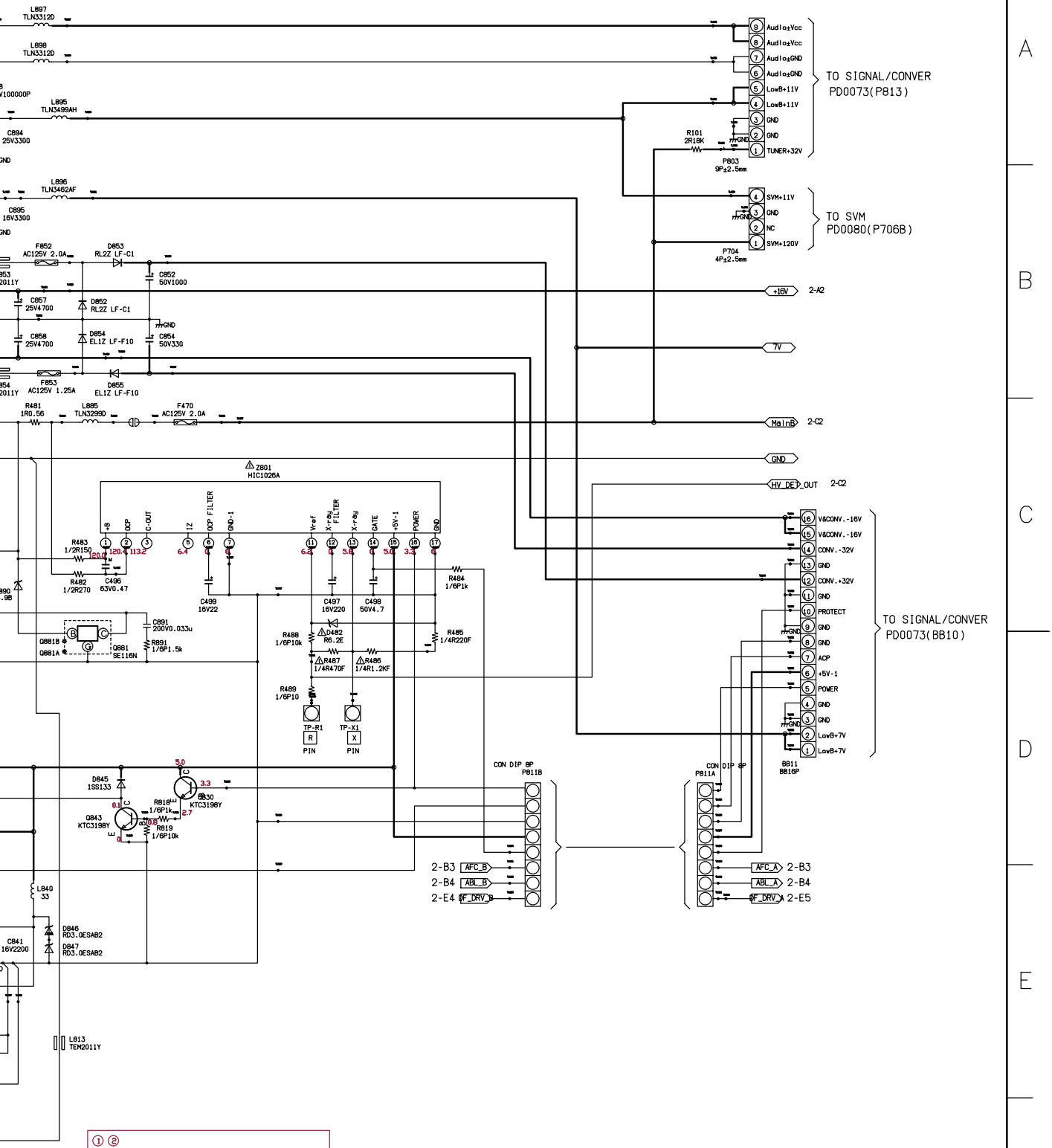
1. RESISTOR Resistance is shown in ohm (k = 1,000, M = 1,000,000) , All resistors are 1/6W and 5% tolerance carbon resistor,unless otherwise noted as the following marks.
   1/2R | Metal or Metal oxide of 1/2 watt
   1/2S | Solid of 1/2 watt
   1PF | Fuse resistor of 1 watt
   10W | Cement of 10 watts
   K = ±10% G = ±2% F = ±1%

2. CAPACITOR Unless otherwise noted in schematic,all capacitor value less than 1 are expressed in μF,and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   Electrolitic capacitor
   Mylar capacitor

3. The parts indicated with * have special characteristics should be replaced with identical parts only.

4. This schematic diagram is the latest the time of copying, so it must be changed in accordance with all informed modification notices.


LIVE AREA
T862 TPW3500AS
Q801 STR-Z4317
VIN GND CONT CSS CD DT VCC DRVCC OC RC COM OUT VB
309.8 0 7.3 4.0 0.5 5.7 17.6 8.0 0.3 0 0 153.0 160.2
T802 TRF3239AF or TRF3232AQ
Q840 MIP280
Q862 TLP421(GR)
Q841 TLP421(GR)
Q842 TLP421(GR)
T840 TPW3425AH
SR81 DLS5D1-0 M 0.25W
D801 RBV-1506 or D15XB60H
D840 LN1WBA60
D885 D4SBL20U
D891 D4SBS4
D851 D4SBS6
D884 D4SBL40
P801 U/C AC CORD
P802
P810 IP
F801 125V7.0A
F860 125V5A
F889 AC125V 4.0A
F890 AC125V 3.15A
F891 AC125V 5.0A
F850 AC125V 5.0A
F851 AC125V 5.0A
F840 125V0.2A
C801 AC275V0.22u
C810 200V1000u
C811 AC250V4700p
C812 AC250V4700p
C813 AC250V4700p
C814 AC250V1000p
C815 AC250V1000p
C840 250V22
C842 63V0.10
C843 2kV100
C860 10000
C862 2kV220pF
C864 2kV1500p
C865 2kV1500p
C868 35V47
C870 630V124
C871 2kV1500p
C874 2kV220pF
C877 2kV1500p
C878 630V124
C879 B100p
C882 200V0.47
C883 OPEN
C884 160V330u
C890 2200
C894 25V3300
C895 16V3300
C851 35V2200
C853 25V1000
R862 1/2R33
R864 1/2R1k
R865 1/2R47
R868 1/2R56
R870 1/2R270
R872 1W 563J
R873 1/6P15
R882 1/6P100
R883 1/2R6.8k
R884 1/6P2.2k
R899 1/2P3.9M
R810 20W1.2u
R842 1/2P56k
R843 1/2P56k
R840 1/2R5.6k
R844 1/6P10k
R841 1/6P1k
D862 EU2A
D863 63V0.10
D875 MTZJ10A
D878 OPEN
D879 MTZJ27C
D880 63V1.0
D881 1SS133
D882 1SS244
D883 1SS133
D890 MTZJ3.9B
D899 TNR10V431K352
D848 1SS133
D841 MTZJ5.6C
D842 MTZJ4.7A
D843 EU2A
AA01
L861 TEM2011Y
L862 TEM2011Y
L888 TEM2011Y
L889 TEM2011Y
L891 TEM2011Y
L892 TEM2011Y
L893 TEM2011Y
L894 TEM2011Y
L851 TEM2011Y
L852 TEM2011Y
L881 TEM2011Y
L882 TEM2011Y
L853 TEM2011Y
L854 TEM2011Y
GND
NOTE
1. RESISTOR Resistance is shown in ohm (k = 1,000. M = 1,000,000) . All resistors are 1/6W and 5% tolerance carbon resistor,unless otherwise noted as the following marks.
1/2R | Metal or Metal oxide of 1/2 watt
1RF | Fuse resistor of 1 watt
K = ±10% G = ±2% F = ±1%
1/2S | Solid of 1/2 watt
10W | Cement of 10 watts
2.CAPACITOR Unless otherwise noted in schematic,all capacitor value less than 1 are expressed in μF,and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.
Electrolitic capacitor
Mylar capacitor
3. The parts indicated with * * have special characteristics should be replaced with identical parts only.
4. This schematic diagram is the latest the time of copying, so it must be changed in accordance with all informed modification notices.



POWER/DEF(POWER)

65HDX82 Series

[SHEET-1/2]

TO SIGNAL/CONVER PD0073(BB10)

TO SIGNAL/CONVER PD0073(BB10)

TO CRT-DRIVE(GREEN) PD0080(PS17)

BB21 BB 16P SOCKET

BB31 8P 2.5PJ-P

5P_2.5mm_1.5A_Beige P404

TO CRT-DRIVE

Focus Pack

PLUG 3P_5mm P405

P401 6P_5mm_5A

P402 6P_5mm_5A

P403 6P_5mm_5A

POWER/DEF (DEF)

① H_DRIVE 1V/div 10us/div

② 5V/div 10us/div

③ 5V/div 10us/div

④ 5V/div 5ms/div

⑤ 50V/div 10us/div

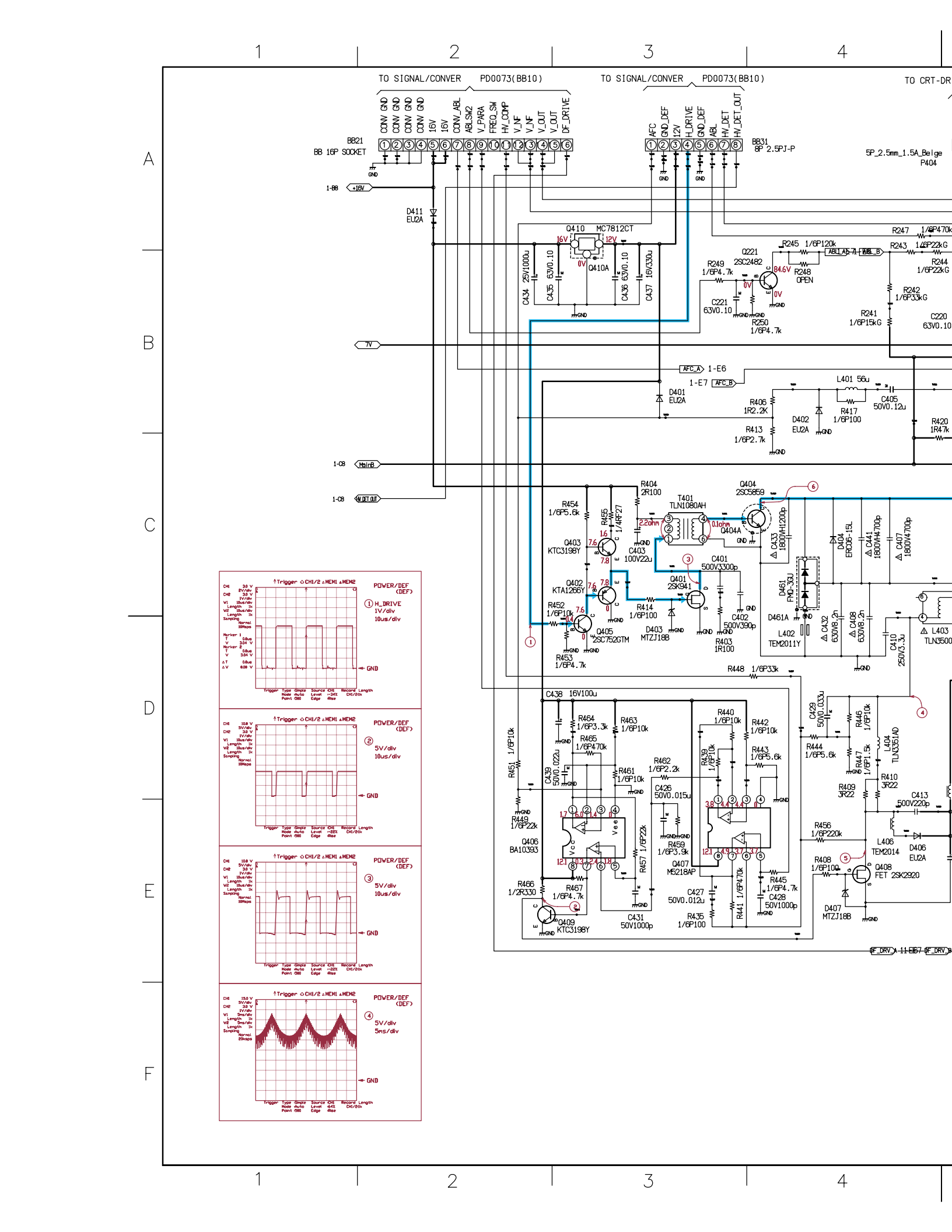
⑥ 200V/div 10us/div

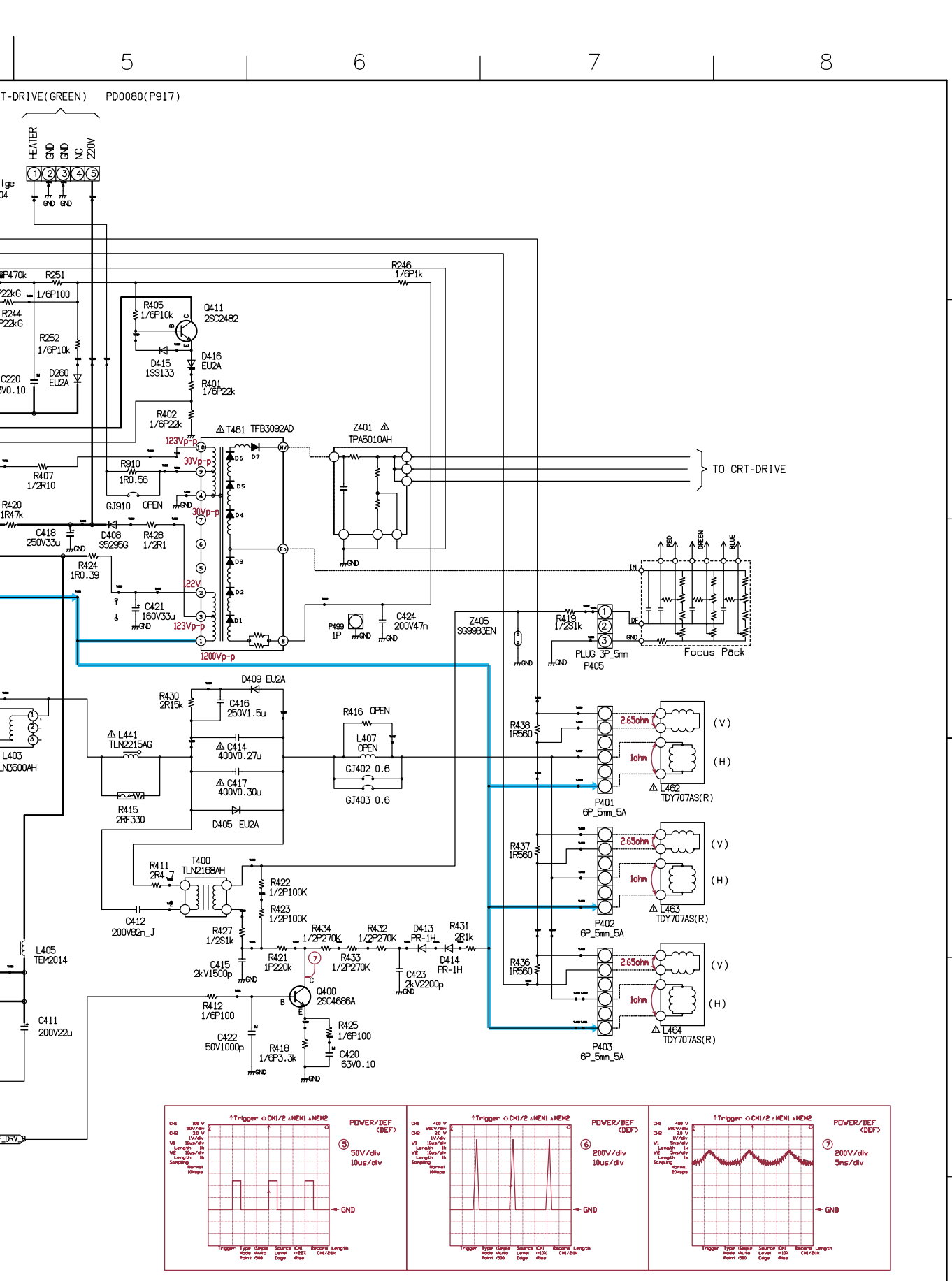
⑦ 200V/div 5ms/div

POWER/DEF(DEF)

65HDX82 Series

[SHEET-2/2]


TO SIGNAL/CONVER PD0073(BB10)
TO SIGNAL/CONVER PD0073(BB10)
TO CRT-DR
CONV GND
CONV GND
CONV GND
CONV GND
16V
16V
CONV_ABL
ABL_SW2
V_PARA
FREQ_SW
HV_COMP
V_INF
V_INF
V_OUT
V_OUT
DF_DRIVE
AFC
GND_DEF
12V
H_DRIVE
GND_DEF
ABL
HV_DET
HV_DET_OUT
BB21
BB 16P SOCKET
BB31
8P 2.5PJ-P
5P_2.5mm_1.5A_Belge
P404
1-B8
+16V
D411
EU2A
Q410 MC7812CT
16V
12V
0V
Q410A
C434 25V1000u
C435 63V0.10
C436 63V0.10
C437 16V330u
Q221
2SC2482
84.6V
0V
R249 1/6P4.7k
R245 1/6P120k
R248 OPEN
R243 1/6P22kG
R244 1/6P22kG
R242 1/6P33kG
R241 1/6P15kG
C221 63V0.10
R250 1/6P4.7k
C220 63V0.10
R247 1/6P470k
7V
AFC_A 1-E6
1-E7 AFC_B
D401
EU2A
L401 56u
C405 50V0.12u
R406 1R2.2K
R417 1/6P100
D402 EU2A
R413 1/6P2.7k
R420 1R47k
1-C8 MainB
1-C8 H_DET_OUT
R404 2R100
T401 TLN1080AH
Q404 2SC5859
R454 1/6P5.6k
R455 1/4RF27
2.2ohm
0.1ohm
Q404A
Q403 KTC3198Y
C403 100V22u
C401 500V3300p
Q401 2SK941
Q402 KTA1266Y
R452 1/6P10k
R414 1/6P100
Q405 2SC752GTM
D403 MTZJ18B
R403 1R100
C402 500V390p
D461 FMD-36U
D461A
L402 TEM2011Y
C432 630V8.2n
C408 630V8.2n
C410 250V3.3u
L403 TLN3500
C433 1800VH1200p
C441 1800VH4700p
C407 1800V4700p
D404 ERC08-15L
R448 1/6P33k
C438 16V100u
R464 1/6P3.3k
R463 1/6P10k
R465 1/6P470k
R461 1/6P10k
R462 1/6P2.2k
R451 1/6P10k
C439 50V0.022u
R449 1/6P22k
Q406 BA10393
R457 1/6P22k
C426 50V0.015u
R459 1/6P3.9k
Q407 M5218AP
R466 1/2R330
R467 1/6P4.7k
Q409 KTC3198Y
C431 50V1000p
R435 1/6P100
C427 50V0.012u
R441 1/6P470k
R445 1/6P4.7k
C428 50V1000p
R440 1/6P10k
R442 1/6P10k
R443 1/6P5.6k
R439 1/6P10k
C429 50V0.033u
R446 1/6P10k
R444 1/6P5.6k
R447 1/6P1.5k
L404 TLN3351AD
R409 3R22
R410 3R22
C413 500V220p
R456 1/6P220k
L406 TEM2014
D406 EU2A
R408 1/6P100
Q408 FET 2SK2920
D407 MTZJ18B
DF_DRV 1-E8
DF_DRV_B
Trigger CH1/2 MEM1 MEM2
POWER/DEF (DEF)
1 H_DRIVE 1V/div 10us/div
GND
2 5V/div 10us/div
GND
3 5V/div 10us/div
GND
4 5V/div 5ms/div
GND

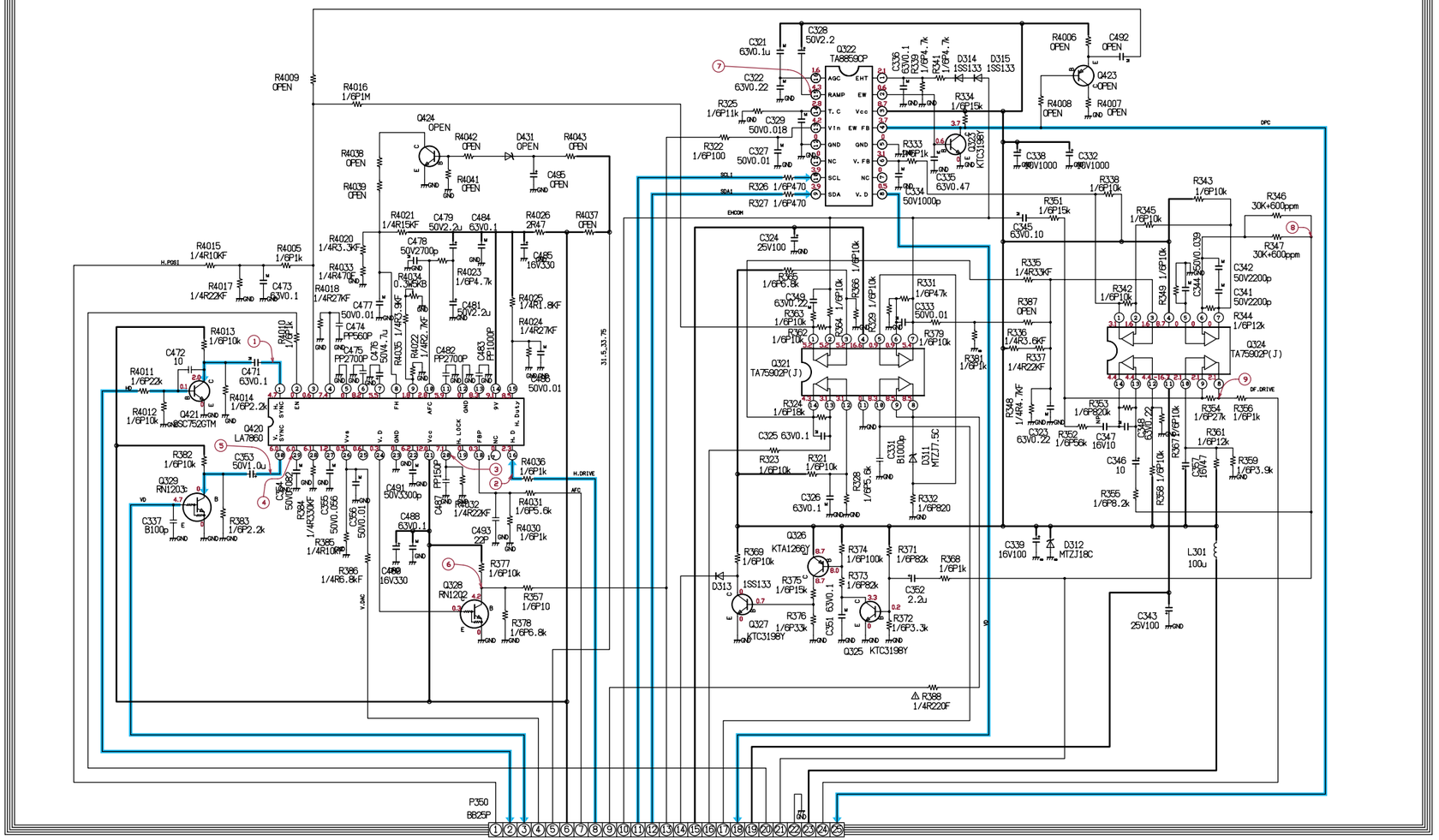


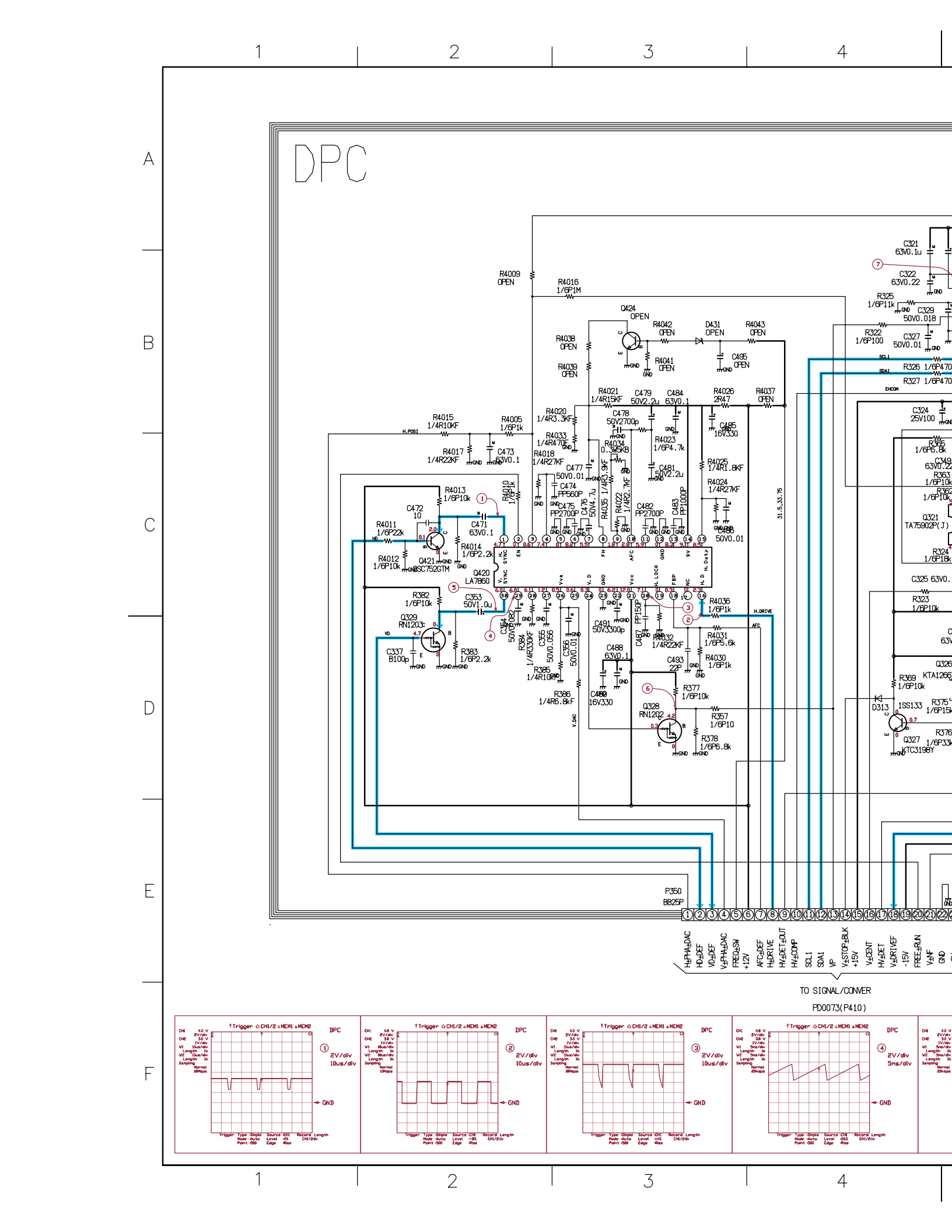
POWER/DEF (DEF)

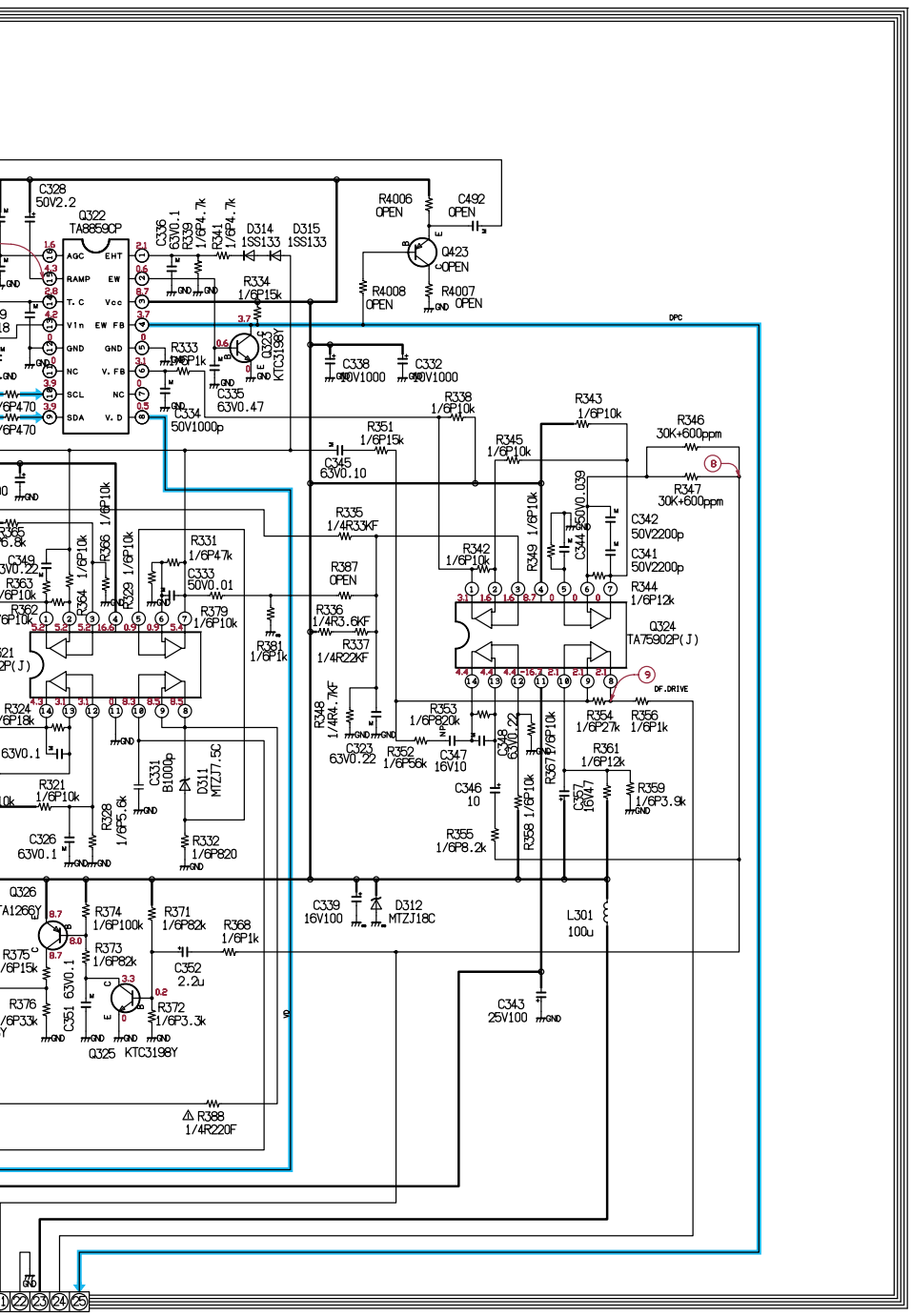
65HDX82 Series

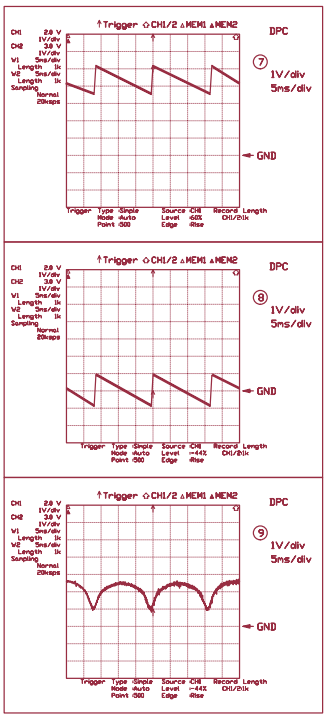
[SHEET-2/2]

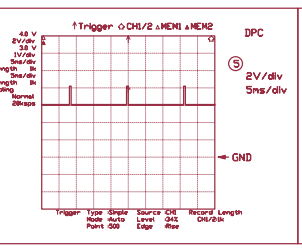
DPC

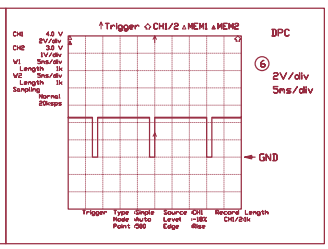

R4009 OPEN
R4016 1/6P1M
Q424 OPEN
R4042 OPEN
D431 OPEN
R4043 OPEN
R4038 OPEN
R4039 OPEN
R4041 OPEN
C495 OPEN
R4021 1/4R15KF
C479 50V2.2u
C484 63V0.1
R4026 2R47
R4037 OPEN
R4020 1/4R3.3KF
C478 50V2700p
C485 16V330
R4015 1/4R10KF
R4005 1/6P1k
R4033 1/4R470F
R4034 0.5W5KB
R4023 1/6P4.7k
R4017 1/4R22KF
C473 63V0.1
R4018 1/4R27KF
C477 50V0.01
C481 50V2.2u
R4025 1/4R1.8KF
C474 PP560P
C475 PP2700P
C476 50V4.7u
R4035 1/4R2.7K
R4022 1/4R2.7K
C482 PP2700P
C483 PP1000P
R4024 1/4R27KF
R4013 1/6P10k
R4010 1/6P1k
C472 10
C471 63V0.1
C486 50V0.01
R4011 1/6P22k
R4012 1/6P10k
Q421 2SC7527GTM
R4014 1/6P2.2k
Q420 LA7860
R382 1/6P10k
C353 50V1.0u
R4036 1/6P1k
Q329 RN1203
C337 B100p
R383 1/6P2.2k
C491 50V3300p
C487 PP150P
R4032 1/4R22KF
R4031 1/6P5.6k
C488 63V0.1
C493 22P
R4030 1/6P1k
R377 1/6P10k
R385 1/4R10KF
C480 16V330
R386 1/4R6.8kF
Q328 RN1202
R357 1/6P10
R378 1/6P6.8k
C328 50V2.2
Q322 TA8859CP
C321 63V0.1u
C322 63V0.22
C336 63V0.1
R4006 OPEN
C492 OPEN
Q423 OPEN
R4008 OPEN
R4007 OPEN
R325 1/6P11k
C329 50V0.018
R334 1/6P15k
D314 1SS133
D315 1SS133
R322 1/6P100
C327 50V0.01
R333 1/6P1k
Q323 KTC3198Y
R326 1/6P470
R327 1/6P470
C335 63V0.47
C334 50V1000p
C338 16V1000
C332 16V1000
R343 1/6P10k
R351 1/6P15k
R338 1/6P10k
R345 1/6P10k
R346 30K+600ppm
R347 30K+600ppm
C345 63V0.10
C324 25V100
R335 1/4R33KF
R342 1/6P10k
C342 50V2200p
C341 50V2200p
R344 1/6P12k
R387 OPEN
R336 1/4R3.6KF
R337 1/4R22KF
Q324 TA75902P(J)
R348 1/4R4.7KF
C323 63V0.22
R352 1/6P56k
R353 1/6P820k
C347 16V10
R354 1/6P27k
R356 1/6P1k
R361 1/6P12k
R359 1/6P3.9k
C346 10
R355 1/6P8.2k
R358 1/6P10k
C357 16V47
C348 63V0.22
R367 1/6P10k
C349 63V0.22
R363 1/6P10k
R362 1/6P10k
R364 1/6P10k
R366 1/6P10k
R329 1/6P10k
R331 1/6P47k
C333 50V0.01
R379 1/6P10k
R381 1/6P1k
Q321 TA75902P(J)
R324 1/6P18k
C325 63V0.1
R323 1/6P10k
R321 1/6P10k
R328 1/6P5.6k
C331 B100p
D311 MTZJT-5C
C326 63V0.1
R332 1/6P820
Q326 KTA1266Y
R369 1/6P10k
R374 1/6P100k
R371 1/6P82k
R368 1/6P1k
C339 16V100
D312 MTZJ18C
L301 100u
D313 1SS133
R375 1/6P15k
R373 1/6P82k
C352 2.2u
C351 63V0.1
R376 1/6P33k
Q327 KTC3198Y
R372 1/6P3.3k
Q325 KTC3198Y
C343 25V100
R388 1/4R220F
P350 B825P
H.POS
H.DRIVE
AFC
V.DRIVE
DF.DRIVE
H.DRIVE
H.POS
AFC
V.DRIVE
DF.DRIVE
SCL1
SDA1
EHCOM


DPC
R4009 OPEN
R4016 1/6P1M
Q424 OPEN
R4042 OPEN
D431 OPEN
R4043 OPEN
R4038 OPEN
R4039 OPEN
R4041 OPEN
C495 OPEN
R4021 1/4R15KF
C479 50V2.2u
C484 63V0.1
R4026 2R47
R4037 OPEN
R4020 1/4R3.3KF
C478 50V2700p
C485 16V330
R4015 1/4R10KF
R4005 1/6P1k
H.POSI
R4033 1/4R470F
R4034 0.3W5KB
R4023 1/6P4.7k
R4017 1/4R22KF
C473 63V0.1
R4018 1/4R27KF
C477 50V0.01
C481 50V2.2u
R4025 1/4R1.8KF
C474 PP560P
R4024 1/4R27KF
R4013 1/6P10k
R4010 1/6P1k
C472 10
C471 63V0.1
C475 PP2700P
C476 50V4.7u
R4035 1/4R2.9KF
R4022 1/4R2.7KF
C482 PP2700P
C483 PP1000P
C486 50V0.01
R4011 1/6P22k
R4012 1/6P10k
Q421 2SC752GTM
R4014 1/6P2.2k
Q420 LA7860
R382 1/6P10k
C353 50V1.0u
C354 50V0.082
C355 50V0.056
C356 50V0.01
R384 1/4R330KF
R385 1/4R10KF
R386 1/4R6.8kF
C491 50V3300p
C487 PP150
R4032 1/4R22KF
R4036 1/6P1k
R4031 1/6P5.6k
R4030 1/6P1k
C488 63V0.1
C493 22P
C489 16V330
R377 1/6P10k
Q328 RN1202
R357 1/6P10
R378 1/6P6.8k
Q329 RN1203
C337 B100p
R383 1/6P2.2k
H.DRIVE
AFC
V.DAC
P350 BB25P
H.PHA±DAC
H.D±DEF
V.D±DEF
V.PHA±DAC
FREQ±SW
+12V
AFC±DEF
H.D±DRIVE
HV±DET±OUT
HV±COMP
SCL1
SDA1
VP
V.STOP±BLK
+15V
V±CENT
HV±DET
H.D±DRIVE
-15V
FREE±RUN
V±NF
GND
TO SIGNAL/CONVER
PD0073(P410)
C321 63V0.1u
C322 63V0.22
R325 1/6P11k
C329 50V0.018
R322 1/6P100
C327 50V0.01
R326 1/6P470
R327 1/6P470
C324 25V100
R365 1/6P6.8k
C349 63V0.22
R363 1/6P10k
R362 1/6P10k
Q321 TA75902P(J)
R324 1/6P18k
C325 63V0.
R323 1/6P10k
Q326 KTA1266
R369 1/6P10k
D313 1SS133
R375 1/6P15k
R376
Q327 KTC3198Y
R357 1/6P33k
31.5.33.75
Trigger CH1/2 MEM1 MEM2
DPC
① 2V/div 10us/div
② 2V/div 10us/div
③ 2V/div 10us/div
④ 2V/div 5ms/div
GND









DPC

65HDX82 Series

AREA 1

ITEM / MODEL	QH173	QH174	AREA 1 & AREA 2
42HX82/42HX82/50HX82 50HX82/57HX82 57HX82/65HX82 65HX82/65HDX82	16k	No use	Use
43H72	16k	16k	Use
50H72	16k	No use	No use

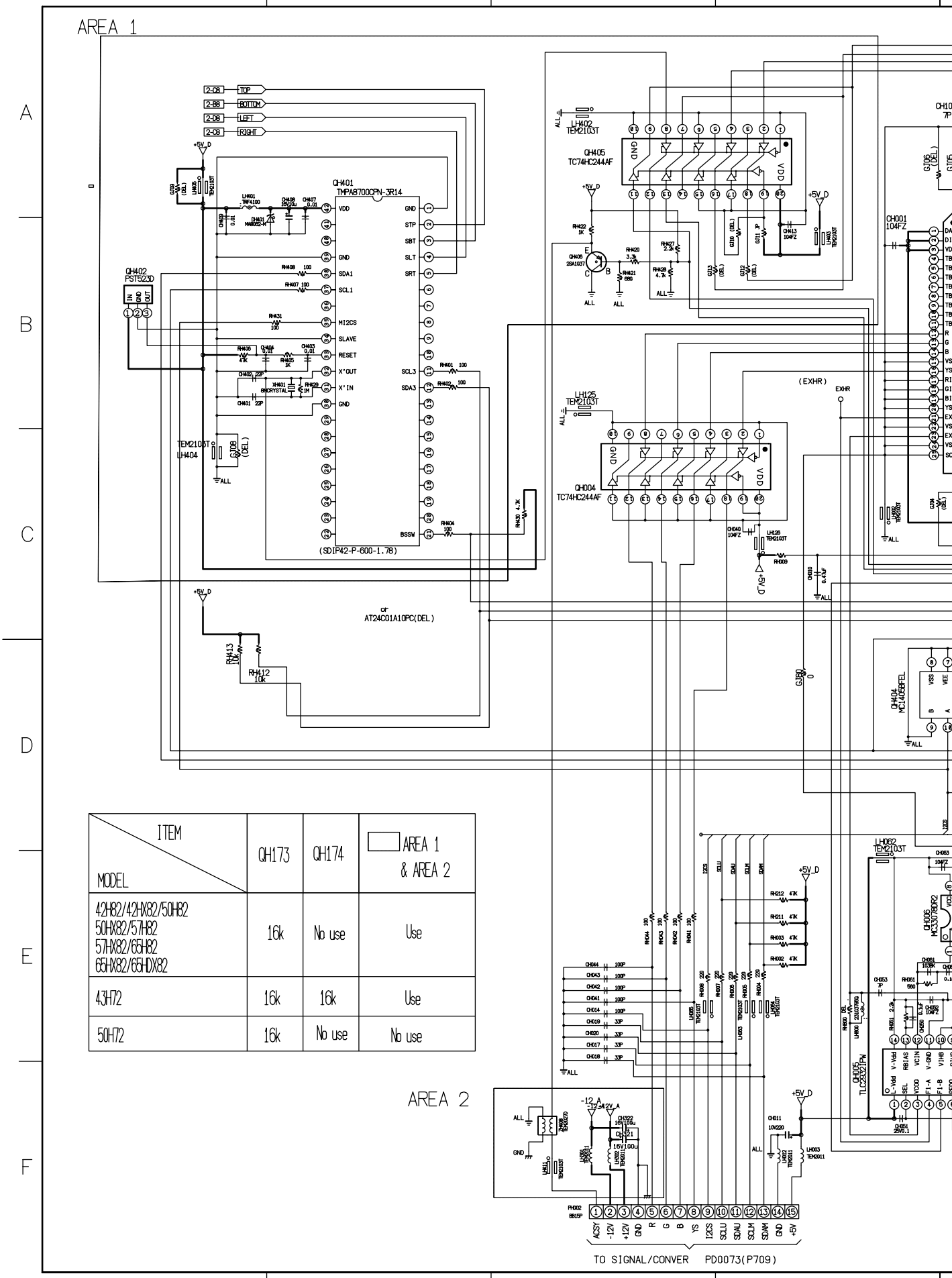
AREA 2

TO SIGNAL/CONVER PD0073(P709)

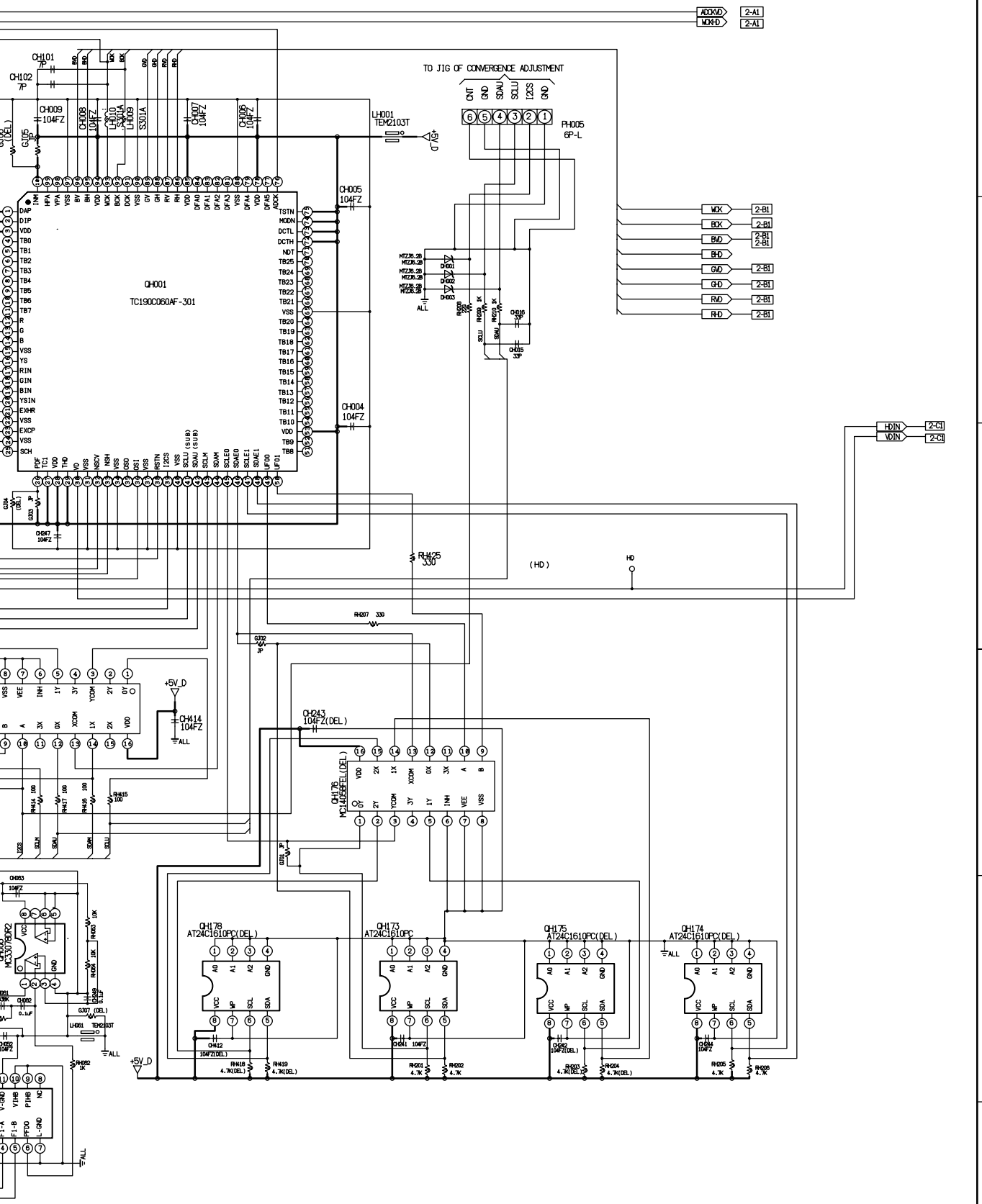
TO JIG OF CONVERGENCE ADJUSTMENT

DIGITAL CONVER

65HDX82 Series
[SHEET-1/2]



ITEM / MODEL	QH173	QH174	AREA 1 & AREA 2
42H82/42HX82/50H82 50HX82/57H82 57HX82/65H82 65HX82/65HDX82	16k	No use	Use
43H72	16k	16k	Use
50H72	16k	No use	No use



DIGITAL CONVER

65HDX82 Series
[SHEET-1/2]

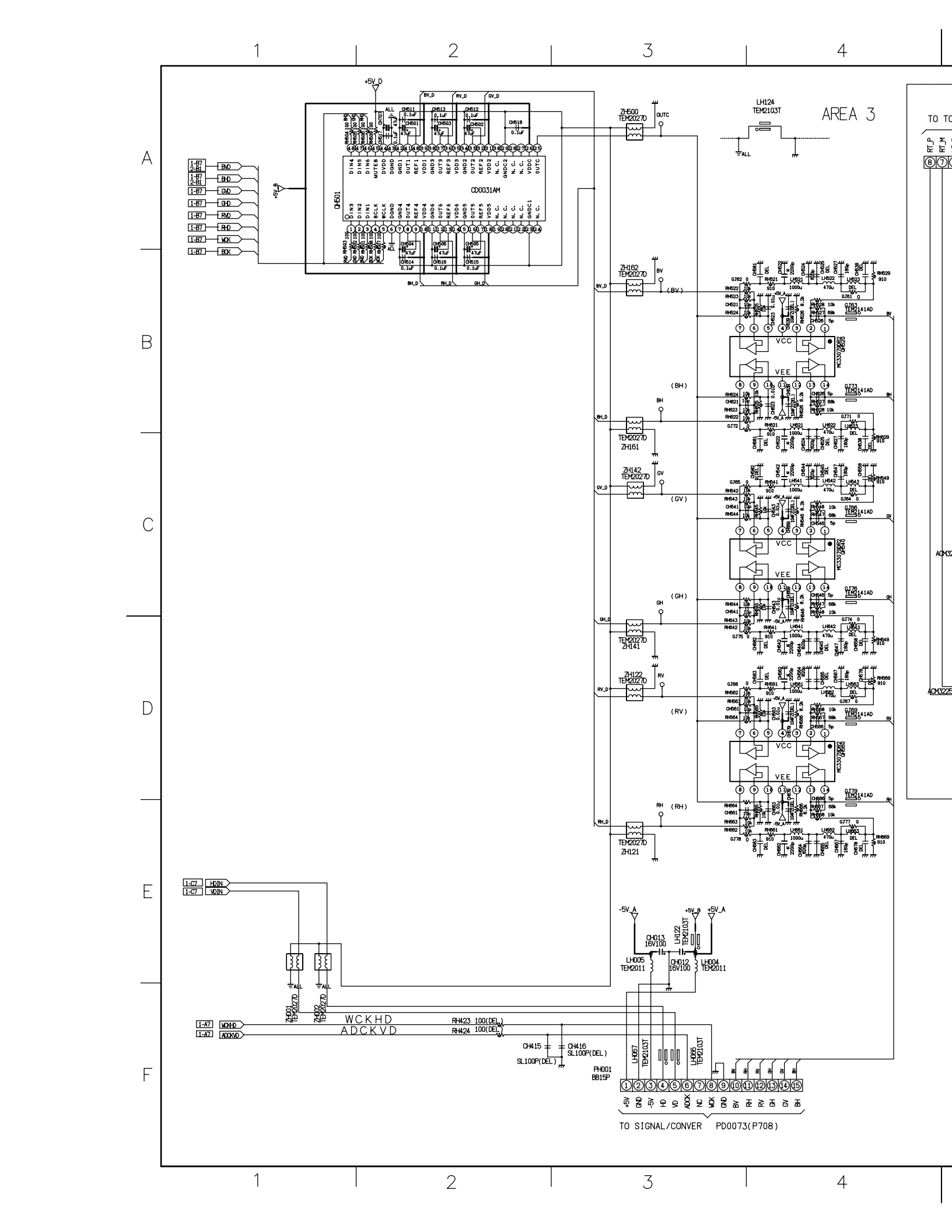
AREA 3

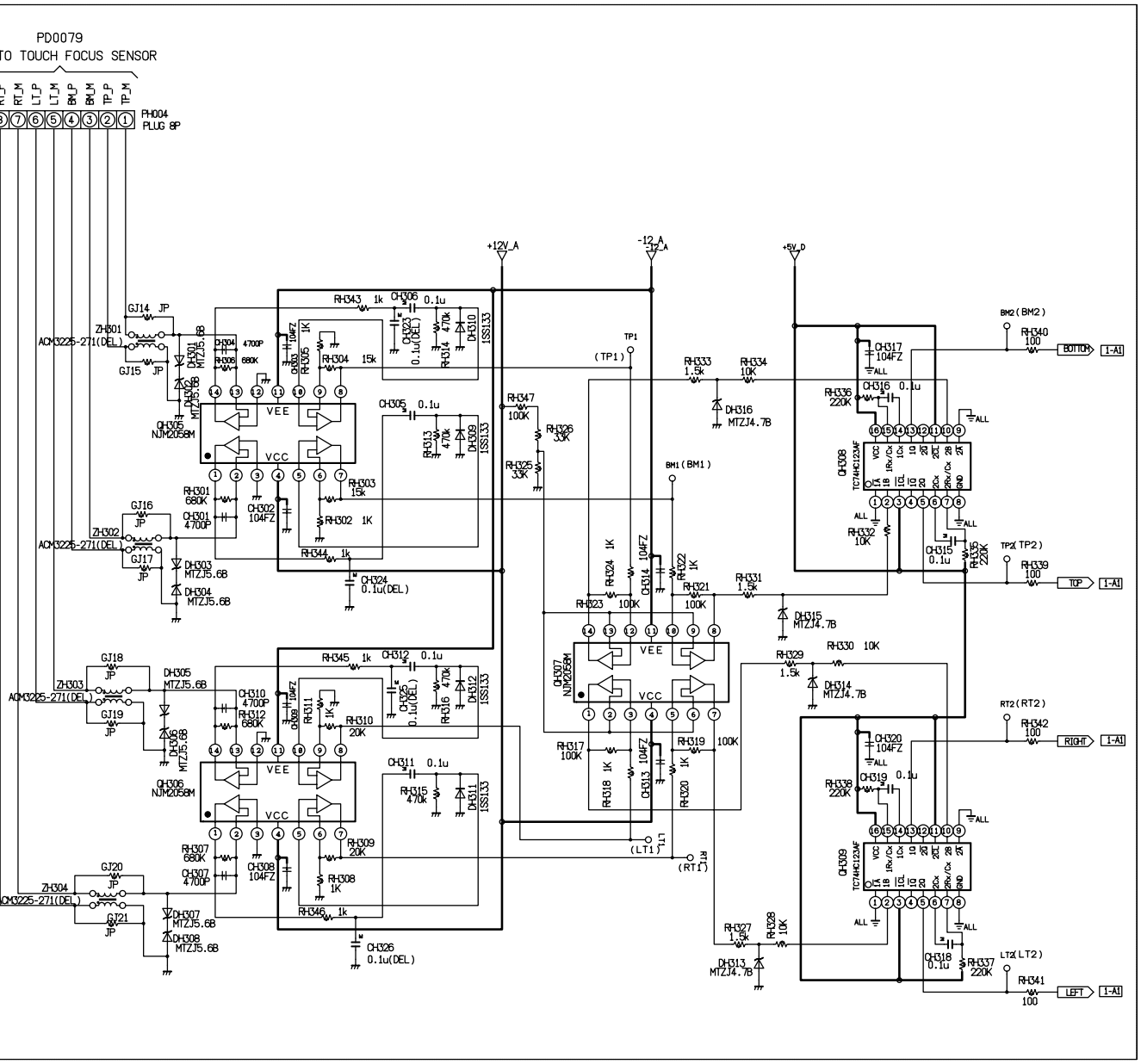
MODEL \ ITEM	AREA 3
42HX82/42HDX82/50HX82/ 50HDX82/57HX82 57HDX82/65HX82/ 65HDX82/65HD82	Use
43H72	Use
50H72	No use

DIGITAL CONVER

65HDX82 Series

[SHEET-2/2]


AREA 3
CD0031AM
TEM2027D
TEM2141AD
MC33078D
TEM2103T
TEM2011
BB15P
WCKHD
ADCKVD
TO SIGNAL/CONVER PD0073(P708)



ITEM / MODEL	AREA 3
42H82/42HX82/50H82/ 50HX82/57H82 57HX82/65H82/ 65HDX82/65HD82	Use
43H72	Use
50H72	No use

DIGITAL CONVER

65HDX82 Series

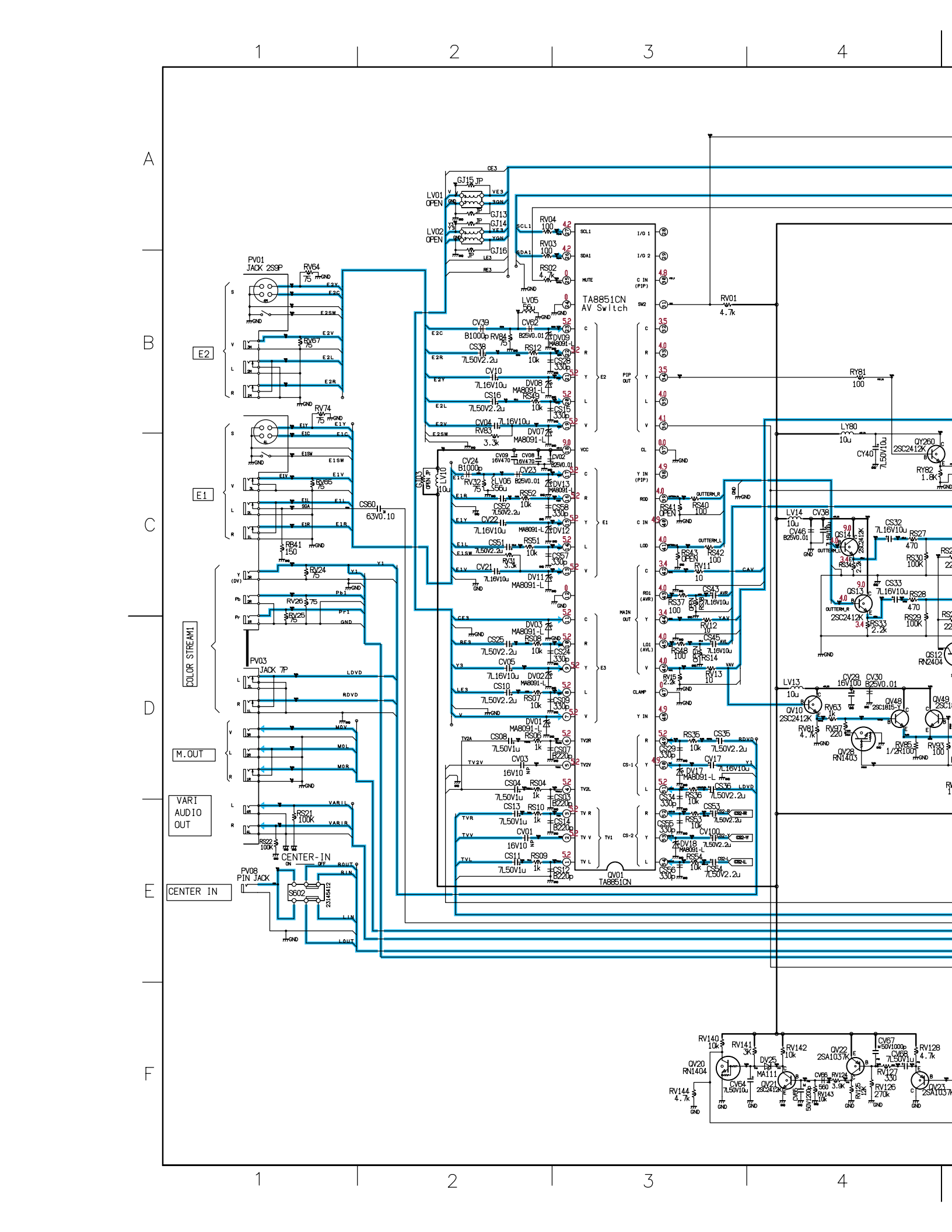
[SHEET-2/2]

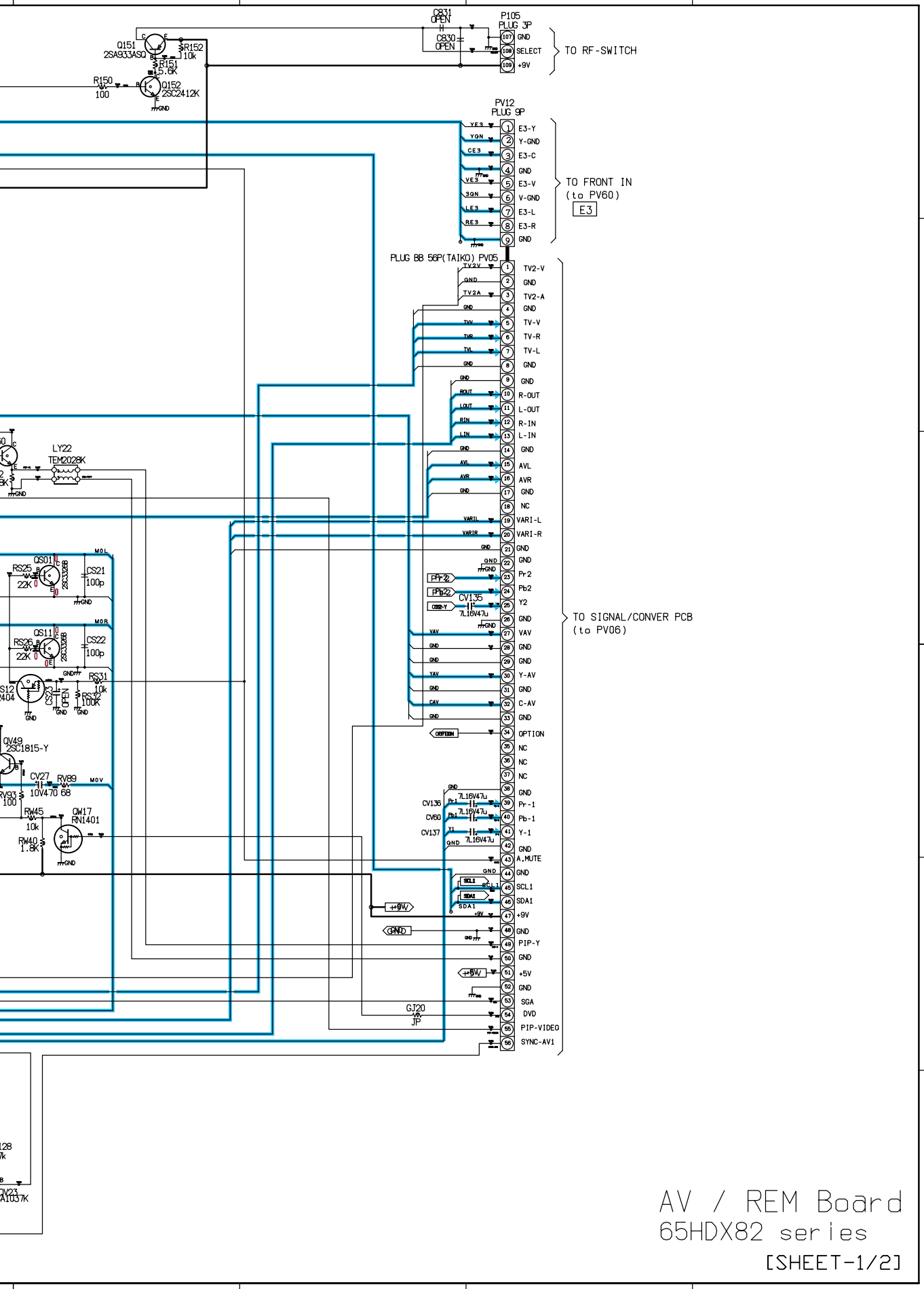
AV / REM Board
65HDX82 series
[SHEET-1/2]

TA8851CN
AV Switch

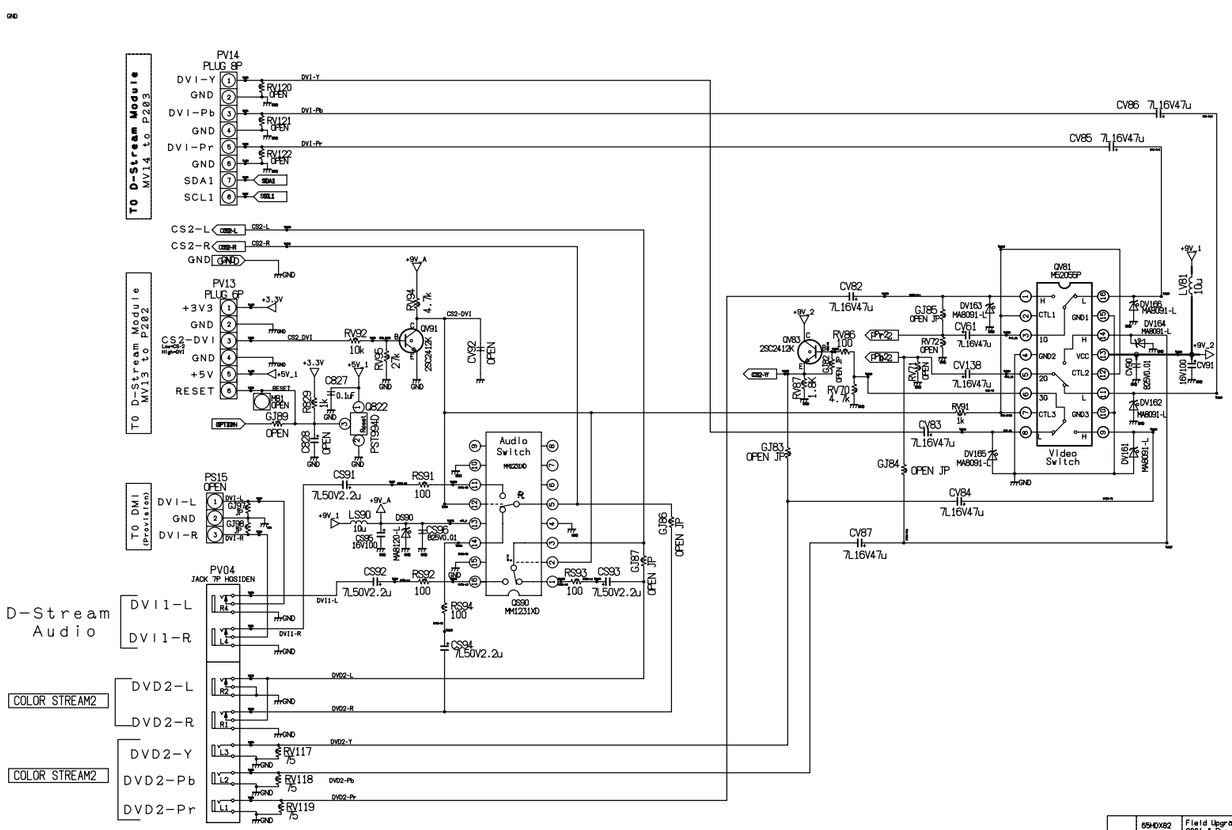
TO RF-SWITCH
TO FRONT IN
(to PV60)
E3
TO SIGNAL/CONVER PCB
(to PV06)

COLOR STREAM1
M.OUT
VARI
AUDIO
OUT
CENTER IN


TA8851CN
AV Switch
QV01
TA8851CN
PV01
JACK 2S9P
PV03
JACK 7P
PV08
PIN JACK
S602
CENTER-IN
E2
E1
COLOR STREAM1
M.OUT
VARI
AUDIO
OUT
CENTER IN

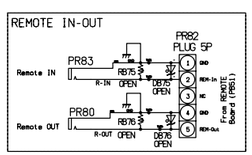


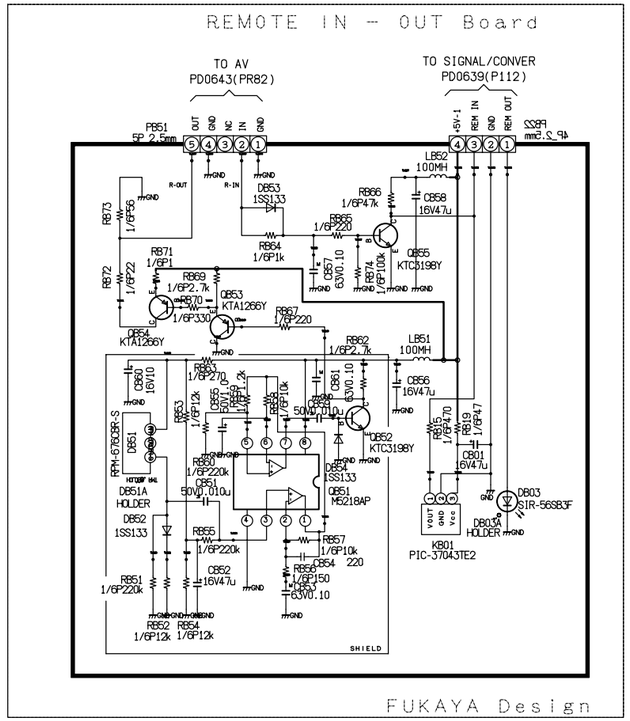
AV / REM Board
65HDX82 series
[SHEET-1/2]

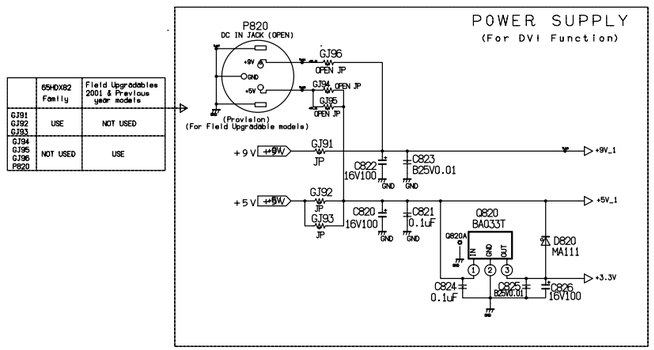


Notes:

1) GJ83, GJ84, GJ85, GJ86, GJ87 used for models without D-Stream. For NON D-Stream models, ICs QV81, QS90, Q822 and their peripheral circuit are Not used.
2) "OPTION" (PV05 pin 34) is just a 'Provision'. Presently no use.



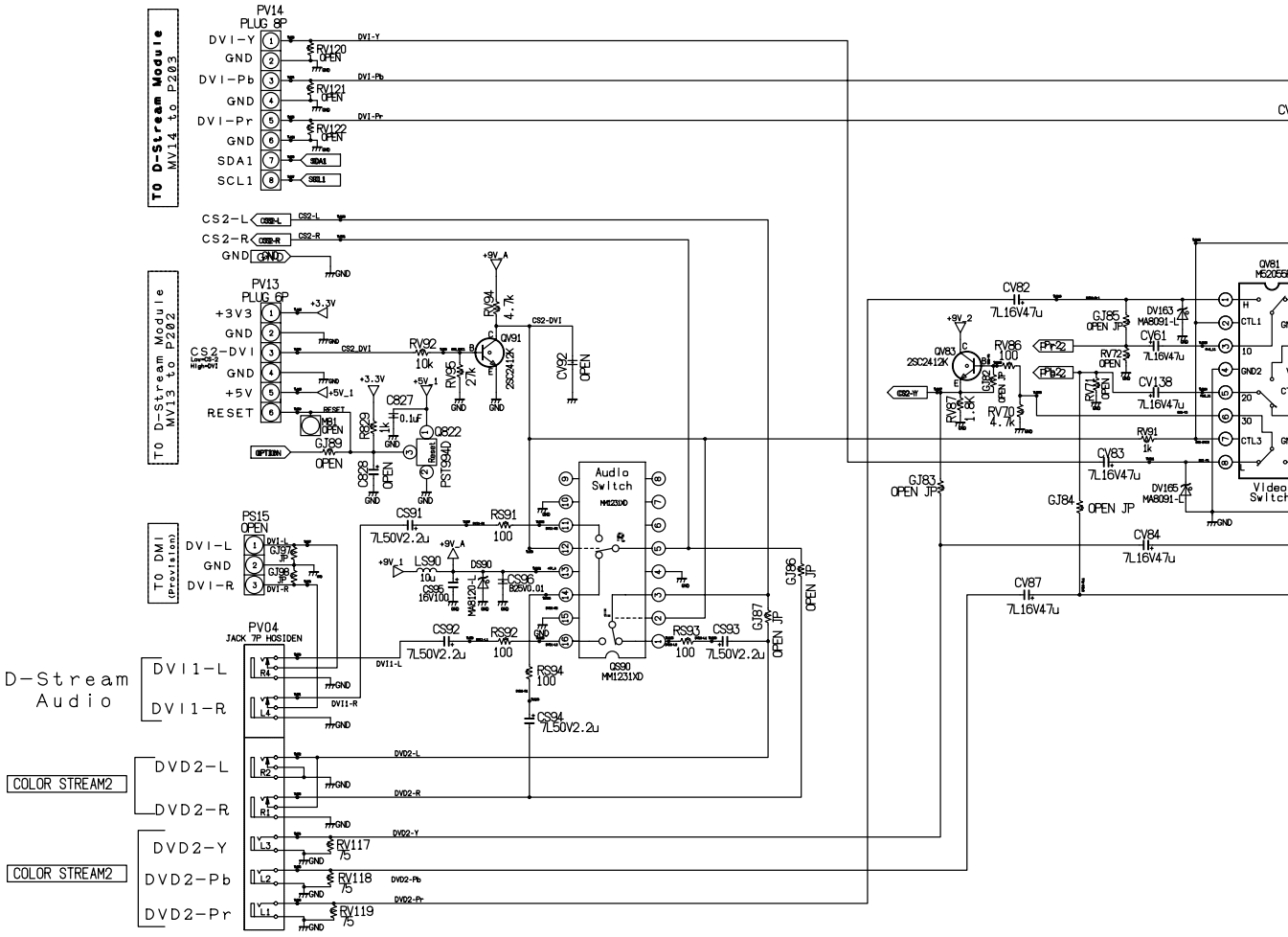




	65HDX82 Family	Field Upgradables 2001 & Previous year models
GJ91 GJ92 GJ93	USE	NOT USED
GJ94 GJ95 GJ96 P820	NOT USED	USE

AV / REM Board
65HDX82 series

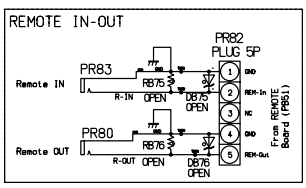
[SHEET-2/2]

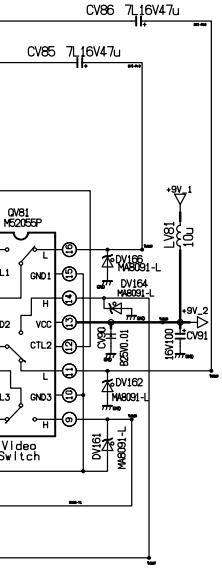


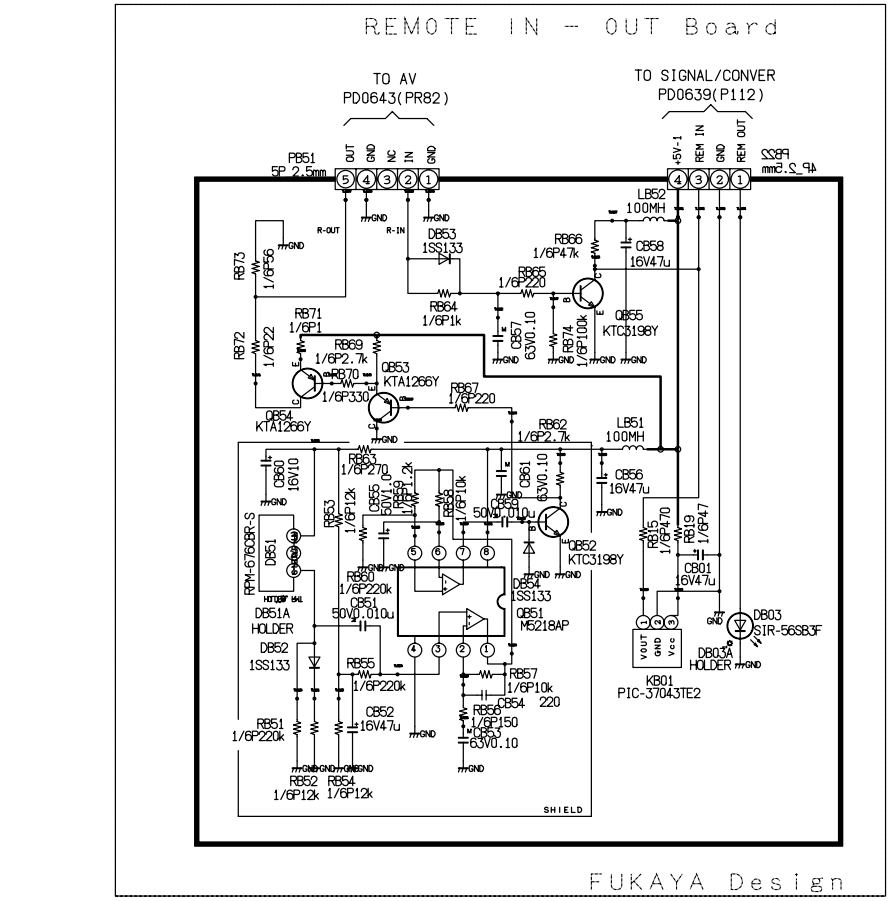
Notes:

1) GJ83, GJ84, GJ85, GJ86, GJ87 used for models without D-Stream. For NON D-Stream models, ICs QV81, QS90, Q822 and their peripheral circuit are Not used.

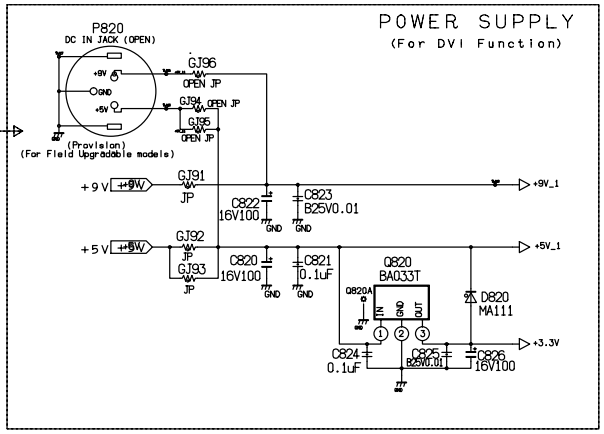
2) "OPTION" (PV05 pin 34) is just a 'Provision'. Presently no use.







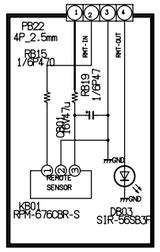
	65HDX82 Family	Field Upgradables 2001 & Previous year models
GJ91 GJ92 GJ93	USE	NOT USED
GJ94 GJ95 GJ96 P820	NOT USED	USE



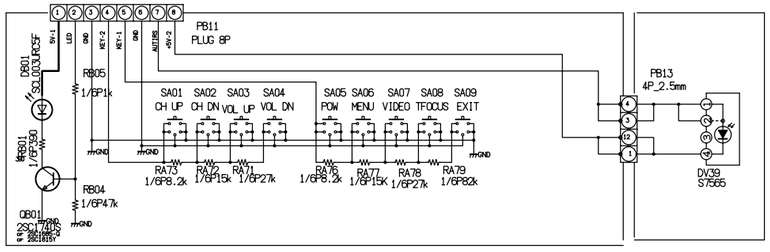
AV / REM Board
65HDX82 series

[SHEET-2/2]

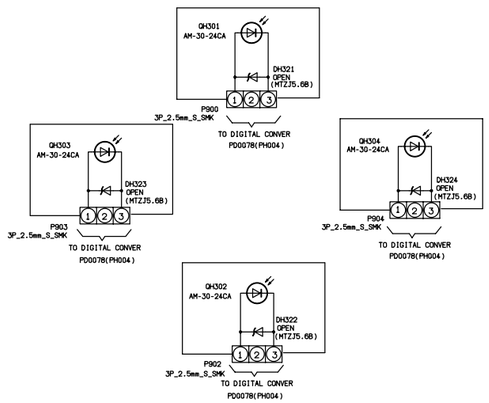
E043Z
REMOTE

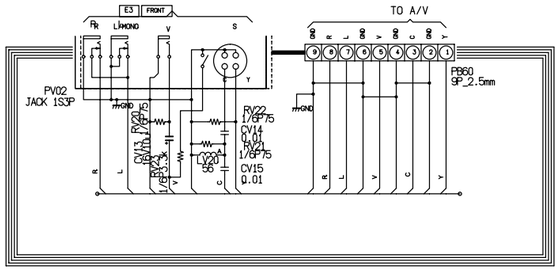


E041Z
FRONT-CONTROL



E044Z
ALS
(Ambient Light Sensor)

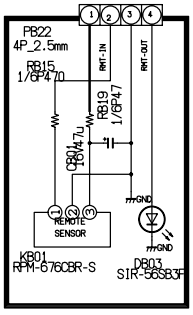




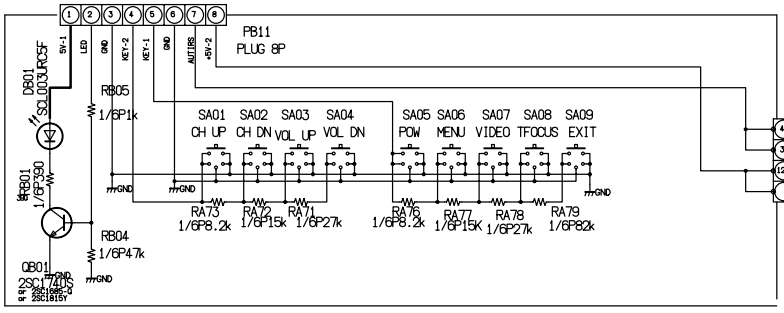
E042Z
FRONT-IN

FRONT
T.FOCUS-SENSOR
65HDX82 Series

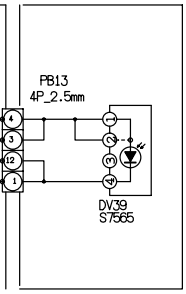
E043Z
REMOTE

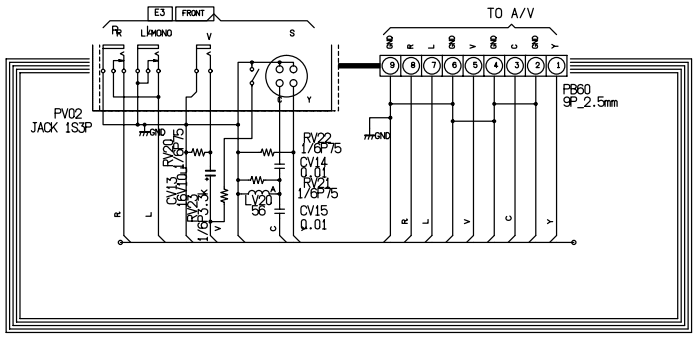


E041Z
FRONT-CONTROL



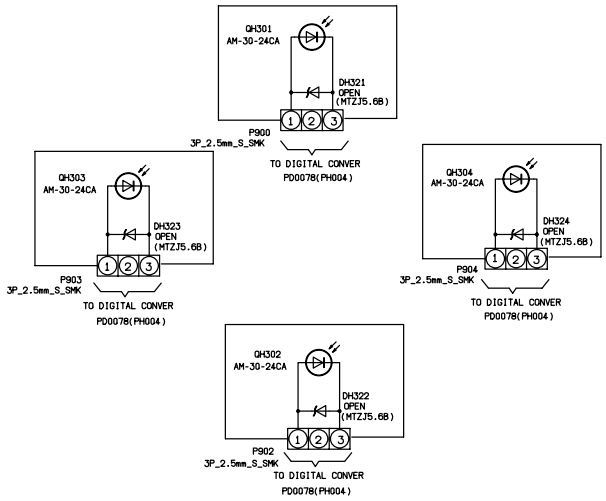
E044Z
ALS
(Ambient Ligh





E042Z
FRONT-IN

ght Sensor)



FRONT

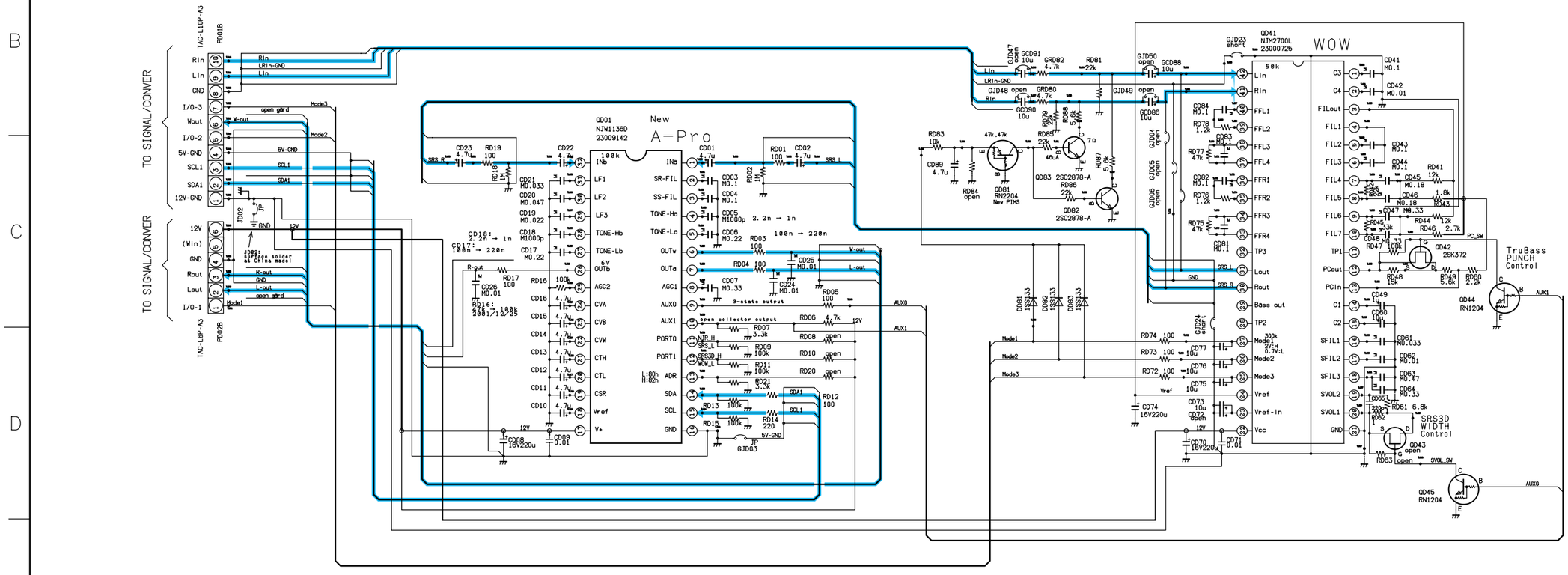
T.FOCUS-SENSOR

65HDX82 Series

Base model: 36HFX72
PD0645A
23787466

WOW	H	H	H
FOCUS	H	L	L
3D-STEREO	L	L	H
TruBass	L	H	L
BYPASS	L	L	L
	Mode1	Mode2	Mode3

US_LCoS_57HL82	PD0645E	45047	57HL82
US_PJ_TNP_W0W	PD0645B	23787523	50HX82
US_DView_TNP_W0W	PD0645A	23787466	36HFX72
US_PJ_TNP_W0W_#1	FWD666	44806	50HX82_#1
US_DView_TVE	PDxxx6	2378xxx6	34HF81-
US_DView_TNP_W0W_#1	FWD666A	44814	36HFX72_#1
Asia_PJ_TSP_W0W	PDxxx4	2378xxx4	43VH9UE
Asia_PJ_DLTV_W0W	PD0645D	45131	43VH9UC
Asia_DView_TVE_W0W	PD0645C	44939	29VX9UH
Asia_DView_TVE_A-Pro	FWD666B	44930	29VH9UH
	unit	SN	model



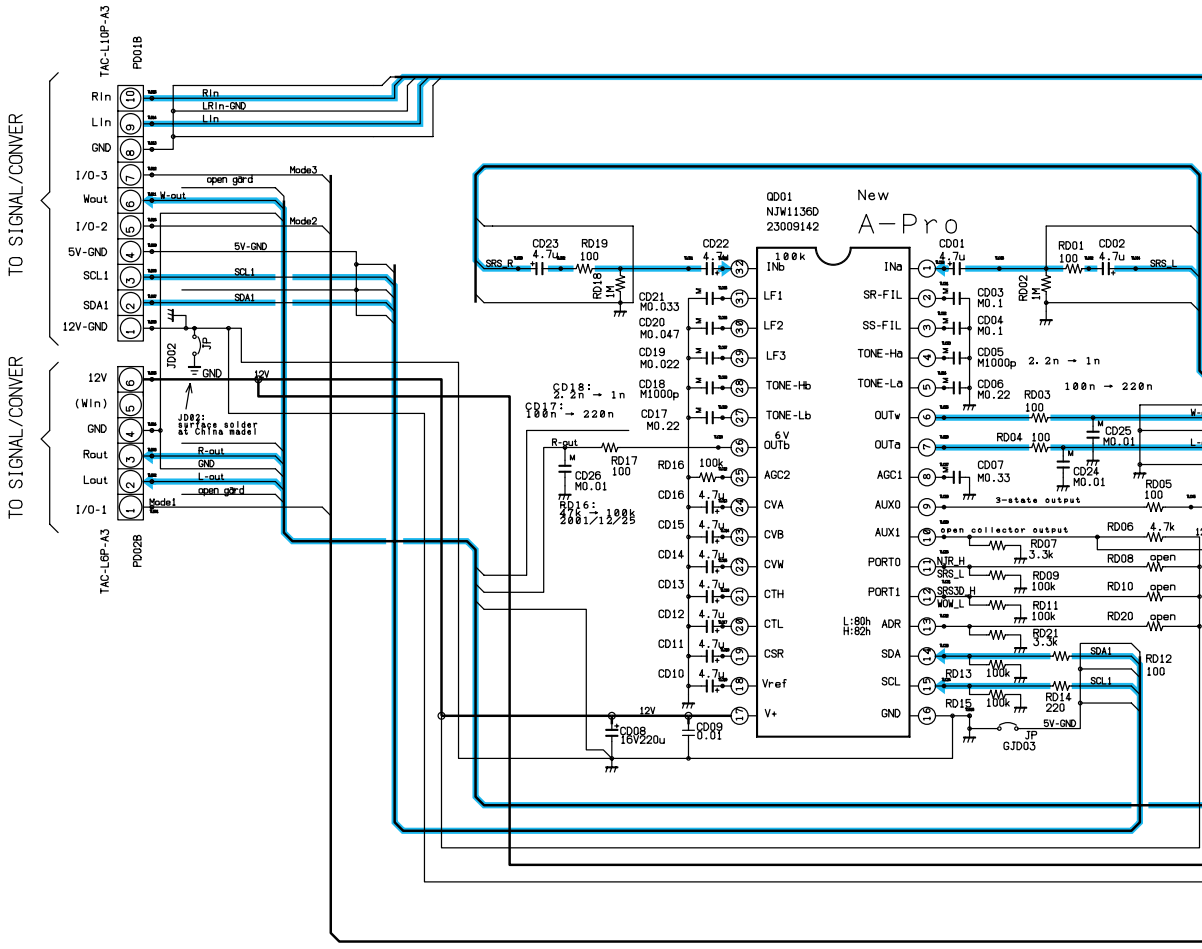
SRS-W□W
65HDX82 Series

Base model: 36HFX72

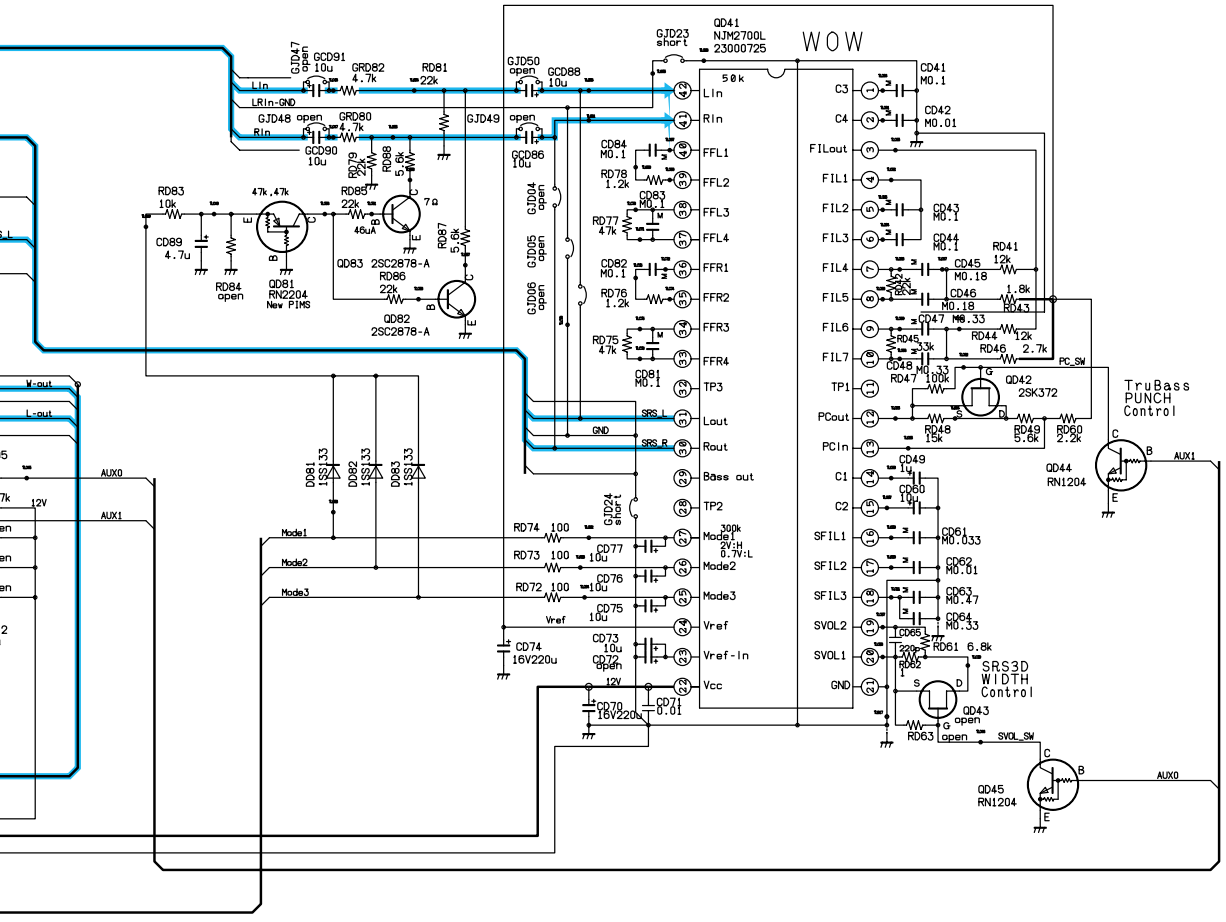
PD0645A

23787466

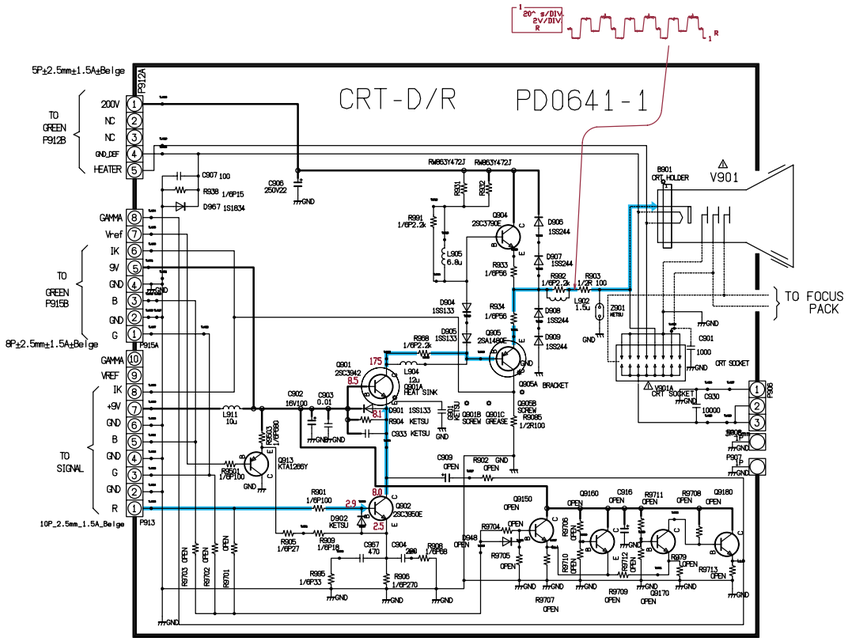
WOW	H	H	H
FOCUS	H	L	L
3D-STEREO	L	L	H
TruBass	L	H	L
BYPASS	L	L	L
	Mode1	Mode2	Mode3

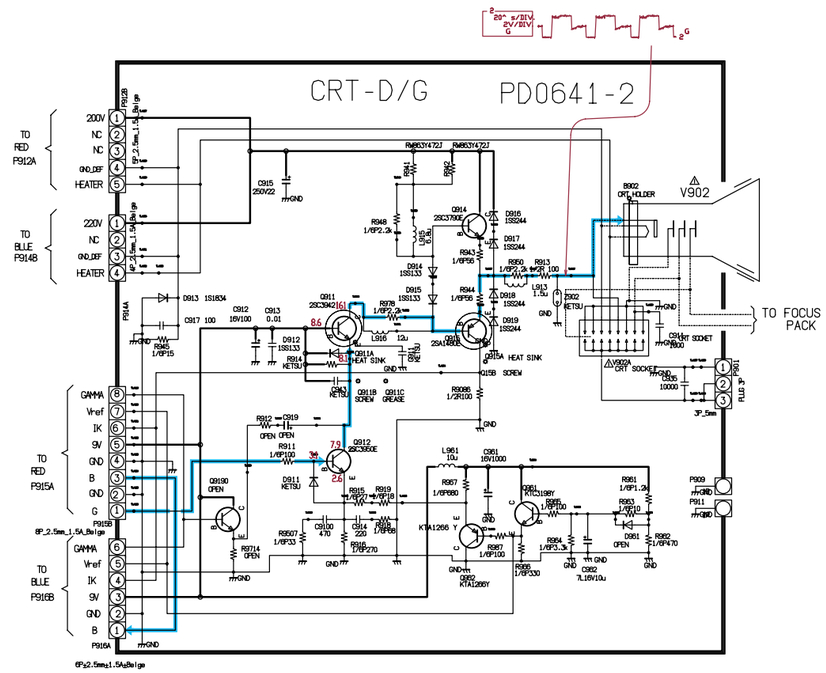


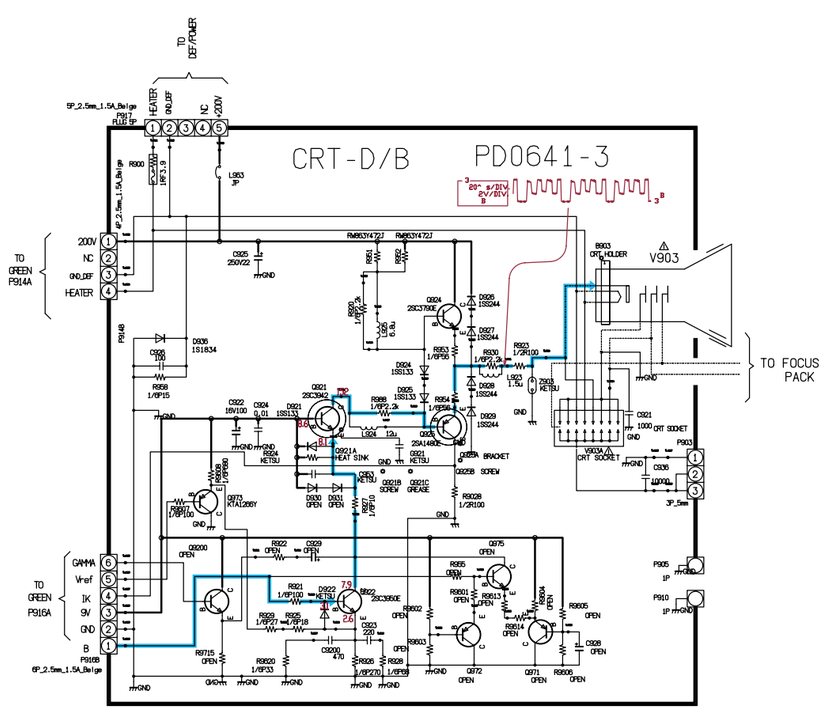
US_LCoS_57HL82	PD0645E	45047	57HL82
US_PJ_TNP_W0W	PD0645B	23787523	50HX82
US_DView_TNP_W0W	PD0645A	23787466	36HFX72
US_PJ_TNP_W0W_#1	FWD666	44806	50HX82_#1
US_DView_TVE	PDxxx6	2378xxx6	34HF81-
US_DView_TNP_W0W_#1	FWD666A	44814	36HFX72_#1
Asia_PJ_TSP_W0W	PDxxx4	2378xxx4	43VH9UE
Asia_PJ_DLTV_W0W	PD0645D	45131	43VH9UC
Asia_DView_TVE_W0W	PD0645C	44939	29VX9UH
Asia_DView_TVE_A-Pro	FWD666B	44930	29VH9UH
	unit	SN	model



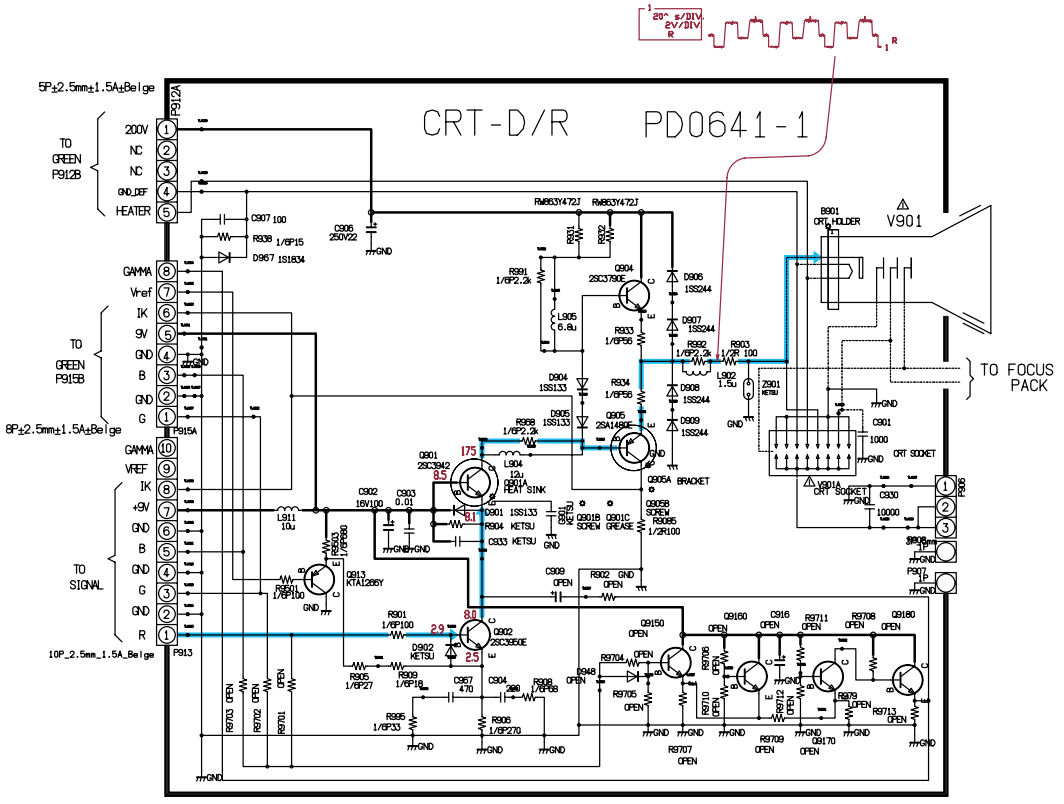
SRS-W□W
65HDX82 Series

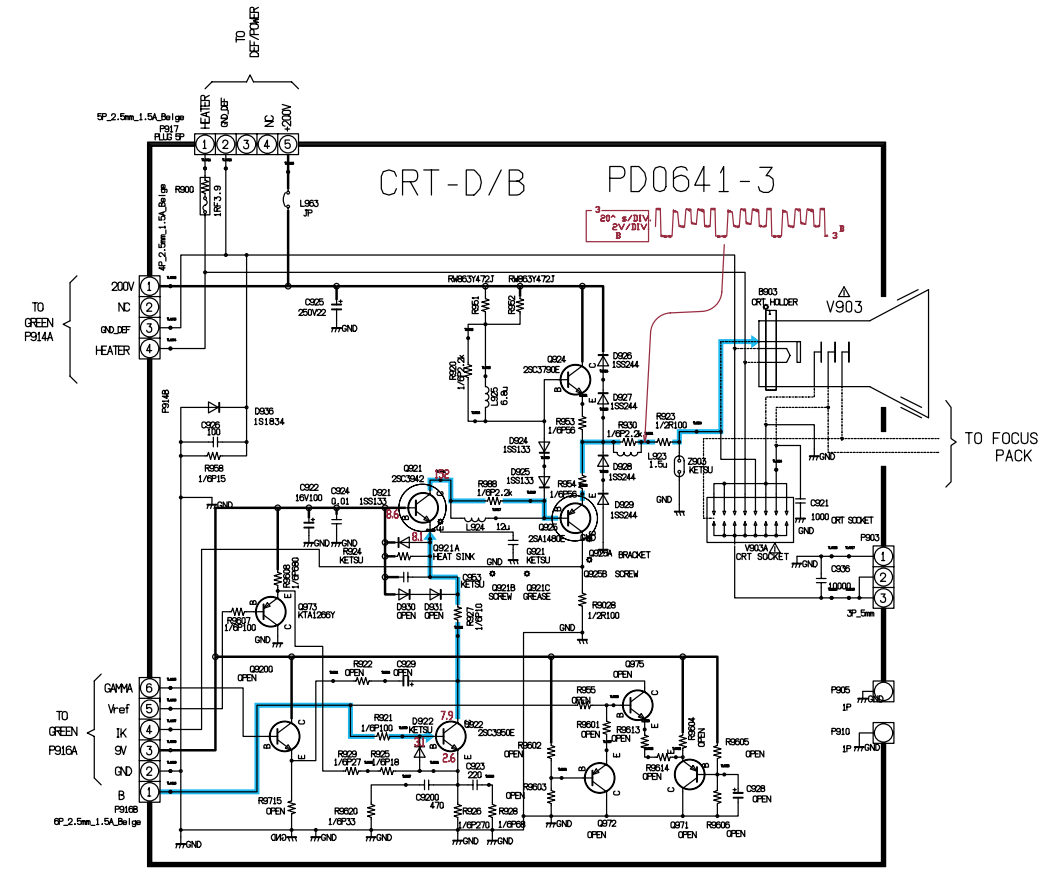


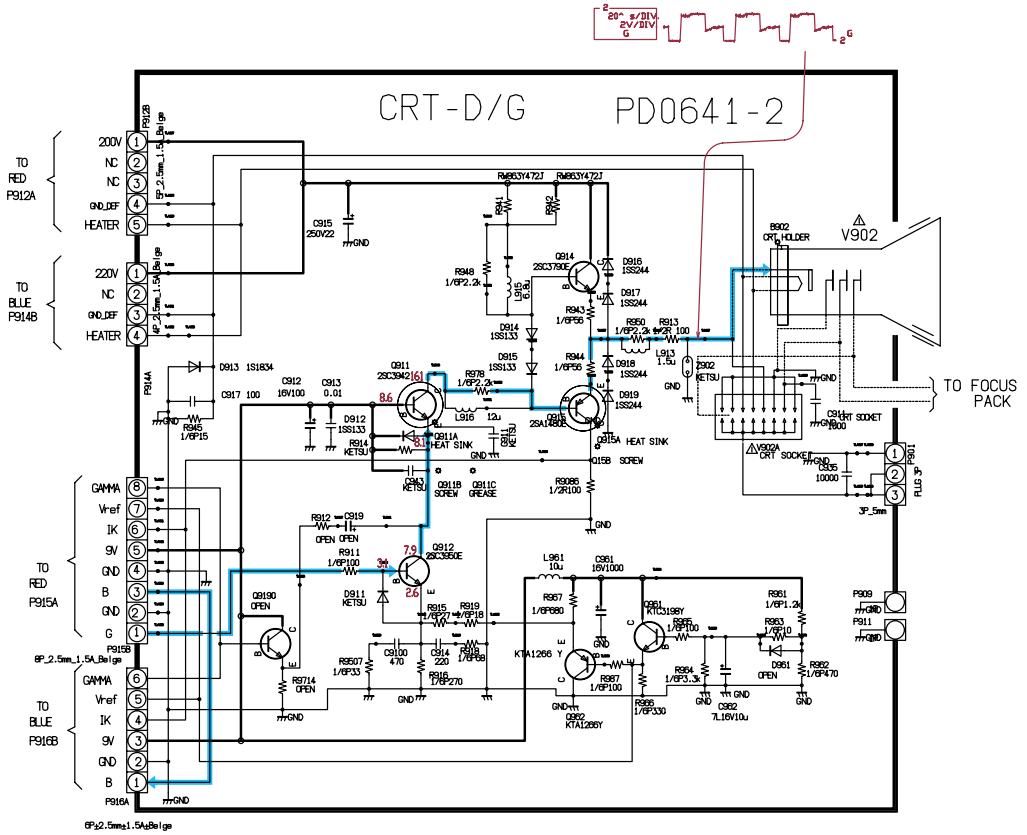




CRTSVM(CRT-DRIVE)
65HDX82 series
[SHEET-1/2]

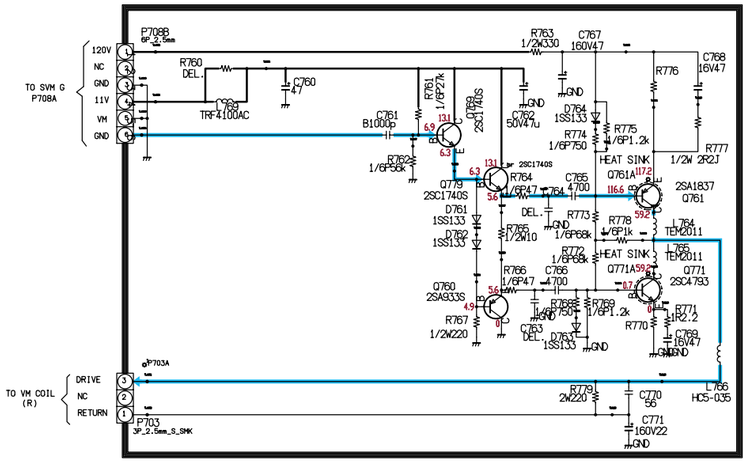

CRT-D/R PD0641-1
TO FOCUS PACK
TO GREEN P912B
TO GREEN P915B
TO SIGNAL
TO GREEN P914A
TO GREEN P916A
CRT SOCKET
BRACKET
HEAT SINK


CRT-D/B PD0641-3
TO DEF/POWER
TO FOCUS PACK
TO GREEN P914A
TO GREEN P916A
CRT SOCKET
BRACKET
HEAT SINK

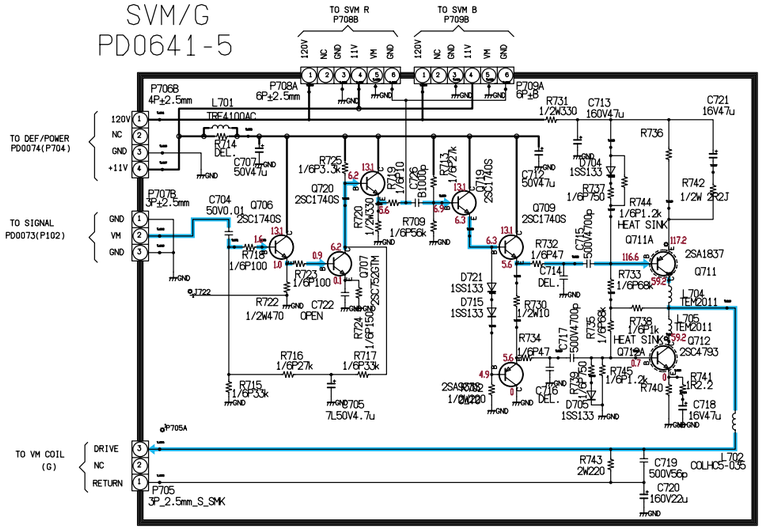


CRTSVM(CRT-DRIVE)
65HDX82 series
[SHEET-1/2]

SVM/R
PD0641-4



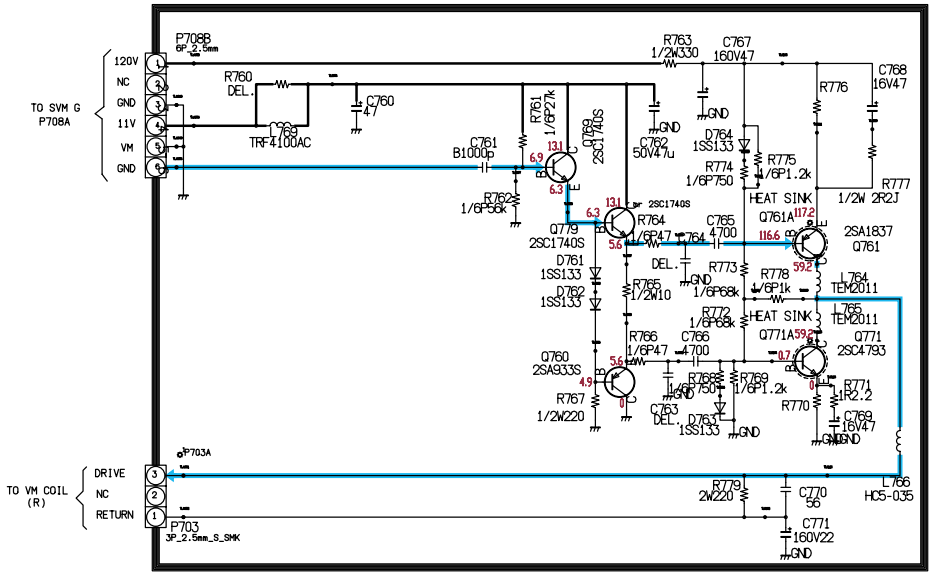
SVM/G
PD0641-5



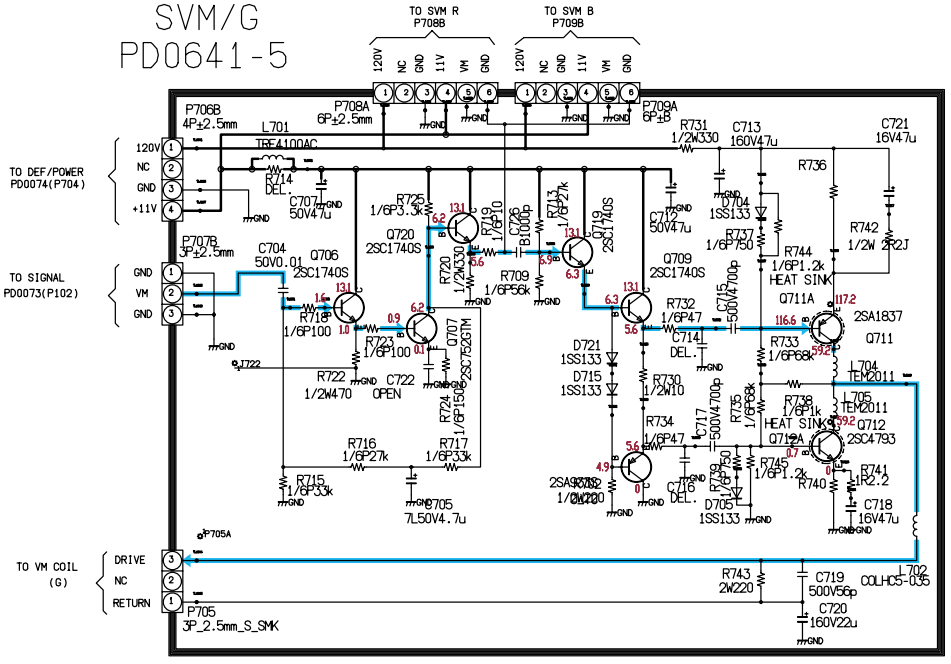
SVM/B
PD0641-6

CRTSVM(SVM)
65HDX82 series
[SHEET-2/2]

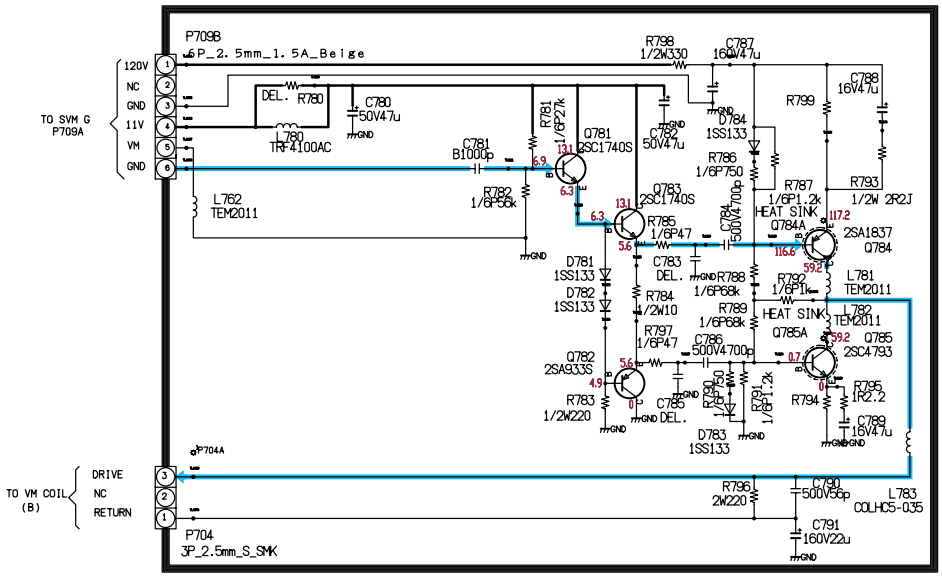
SVM/R
PD0641-4



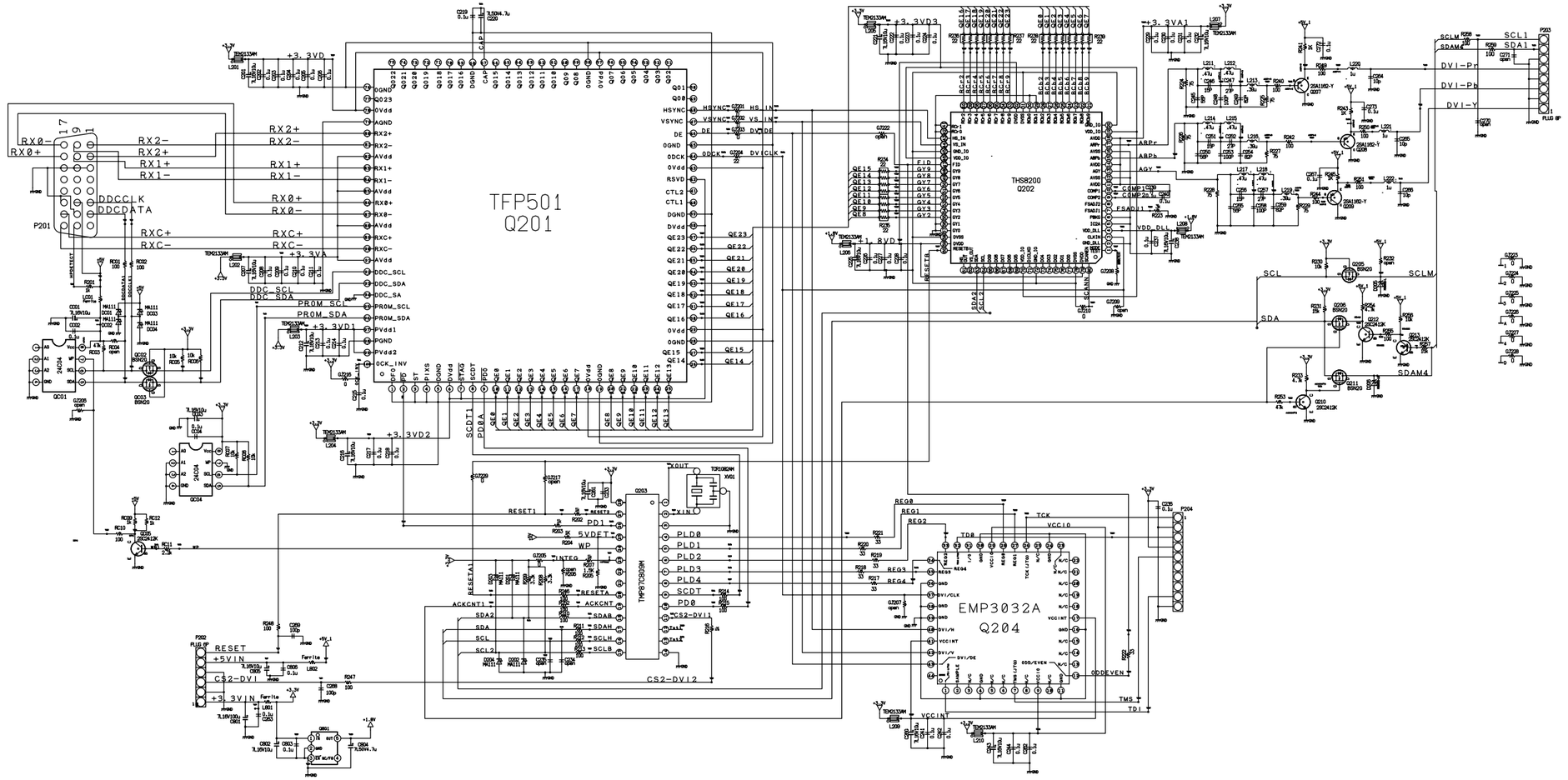
SVM/G
PD0641-5

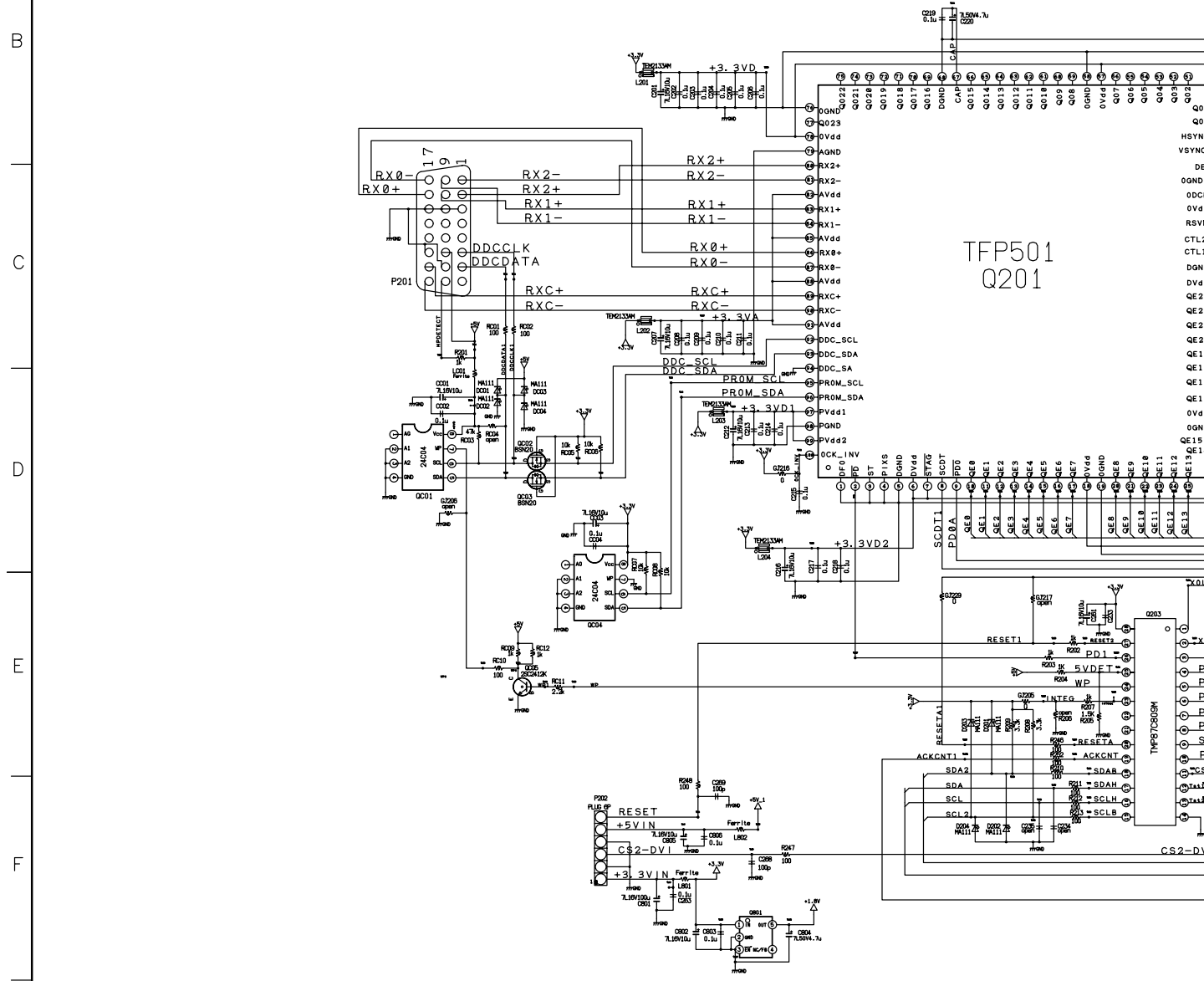


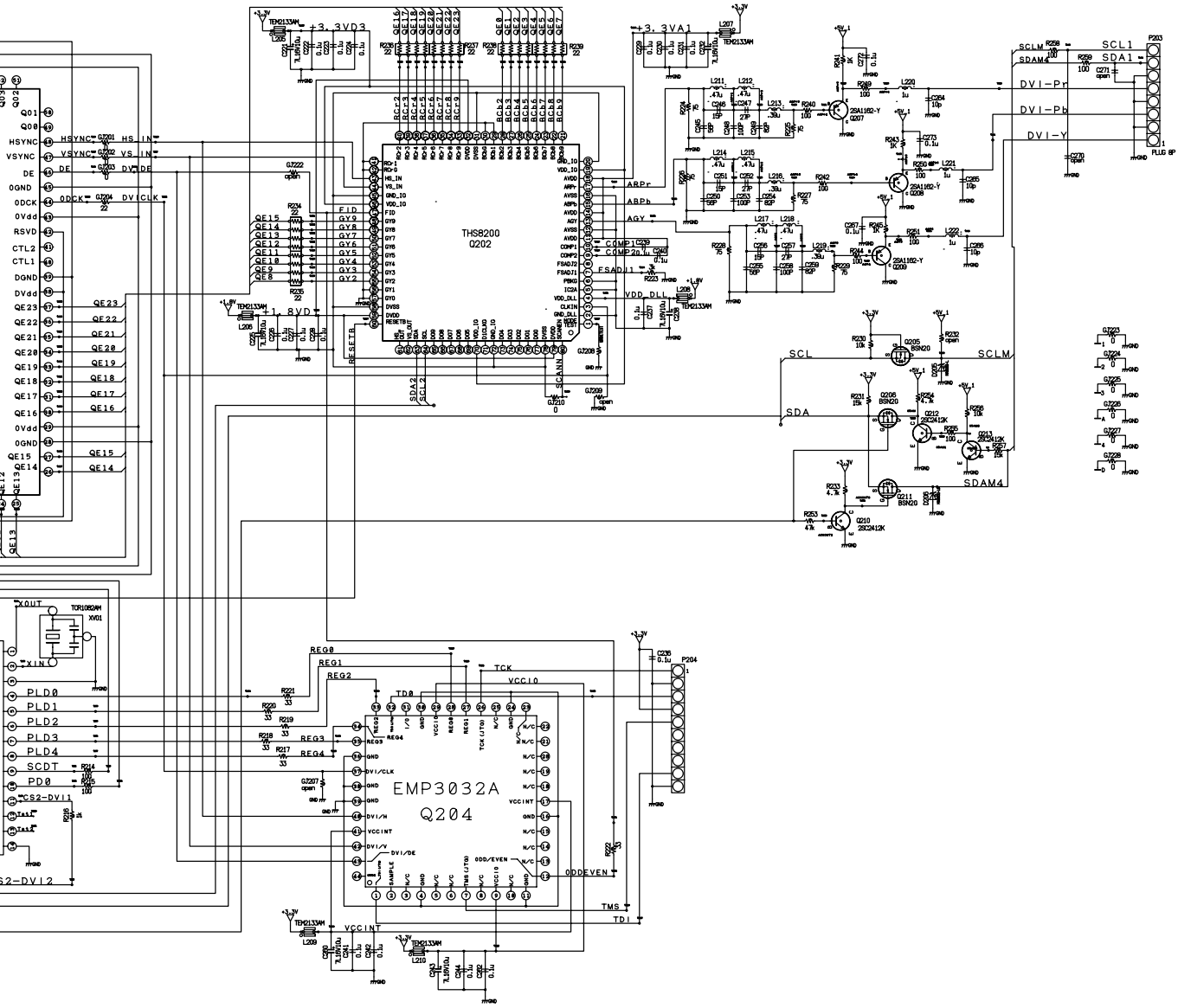
SVM/B
PD0641-6



CRTSVM(SVM)
65HDX82 series
[SHEET-2/2]


TFP501
Q201
THS8200
Q202
EMP3032A
Q204
TMP87C809M
RX0-
RX0+
RX2-
RX2+
RX1-
RX1+
RXC-
RXC+
DDCCLK
DDCDATA
P201
DDC_SCL
DDC_SDA
PROM_SCL
PROM_SDA
+3.3VD
+3.3VD1
+3.3VD2
+3.3VD3
+3.3VA
+3.3VA1
+1.8VD
HSYNC
VSYNC
DE
DVICLK
HS_IN
VS_IN
DVI_DE
ABPr
ABPb
AGY
COMP1
COMP2
FSADJ1
VDD_DLL
SCL
SDA
SCLM
SDAM
SCL1
SDA1
DVI-Pr
DVI-Pb
DVI-Y
P203
PLUG 8P
RESET
+5VIN
CS2-DVI
+3.3VIN
P202
XOUT
XIN
RESET1
PD1
5VDET
WP
INTEG
ACKCNT1
SDA2
SCL2
SCDT
PD0
CS2-DVI1
CS2-DVI2
REG0
REG1
REG2
REG3
REG4
TCK
TDI
TMS
VCCIO
VCCINT
ODDEVEN
P204
OUT
DVI MODULE
65HDX82 Series


TFP501
Q201
P201
RX0−
RX0+
RX1−
RX1+
RX2−
RX2+
RXC−
RXC+
DDCCLK
DDCDATA
DDC_SCL
DDC_SDA
PROM_SCL
PROM_SDA
+3.3VD
+3.3VA
+3.3VD1
+3.3VD2
RESET
+5VIN
+3.3VIN
CS2-DVI
RESET1
PD1
5VDET
WP
INTEG
RESETA
ACKCNT
SDAB
SDAH
SCLB
SCLH
SDA2
SDA
SCL
SCL2
SCDT1
PD0A
TMP87C809M



DVI MODULE
65HDX82 Series